



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>

ASSOCIATION OF

COLLEGES AND PREPARATORY
SCHOOLS

OF THE SOUTHERN STATES

PROCEEDINGS OF THE
SEVENTH ANNUAL MEETING

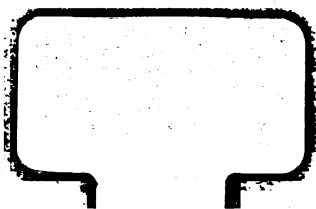
1901

DEPARTMENT OF EDUCATION
LELAND STANFORD JUNIOR UNIVERSITY

HELD AT

The University of the South, Sewanee, Tenn.

NOVEMBER 6-8, 1901



ASSOCIATION OF
COLLEGES AND PREPARATORY
SCHOOLS

OF THE SOUTHERN STATES

PROCEEDINGS OF THE
SEVENTH ANNUAL MEETING

HELD AT
The University of the South, Sewanee, Tenn.
NOVEMBER 6-8, 1901

PRINTED BY
The University of Chicago Press
CHICAGO



CONTENTS

	PAGE
DELEGATES PRESENT, 1901 - - - - -	v
ROLL OF MEMBERSHIP - - - - -	vi
SKETCH OF THE ASSOCIATION - - - - -	viii
OFFICERS FOR DIFFERENT YEARS - - - - -	viii
LIST OF PUBLICATIONS - - - - -	x
PROCEEDINGS:	
Part I—Minutes - - - - -	I
Part II—Papers and Addresses :	
President's Address, Dr. James K. Powers - - - - -	5
"Laboratories and Science Teaching,"	
Professor John P. Campbell - - - - -	16
"The Public High School as a Preparation for College,"	
Mr. E. J. Batty - - - - -	28
"Substitutes for Latin and Greek in Admission Requirements,"	
Professor F. W. Moore - - - - -	36
Mr. W. D. Mooney - - - - -	43
"Preparatory Training for Girls,"	
Professor J. L. Armstrong - - - - -	47
"The Problems of the Small College in the Southern States,"	
Professor E. J. Babbitt - - - - -	55
CONSTITUTION AND BY-LAWS - - - - -	71
SPECIAL ANNOUNCEMENT - - - - -	73

ASSOCIATION OF COLLEGES AND PREPARATORY SCHOOLS OF THE SOUTHERN STATES

DELEGATES AT THE SEVENTH ANNUAL MEETING

Agnes Scott Institute, Decatur, Ga., Professor H. B. Arbuckle.
Alabama Polytechnic Institute, Auburn, Ala., Professor C. C. Thach.
Cumberland City Academy, Cumberland City, Tenn., Principal J. H. Bayer.
Elizabeth Training School, Petersburg, Tenn., Mr. Arthur C. Minter.
Emory College, Oxford, Ga., President C. E. Dowman.
Fairmount School, Monteagle, Tenn., Miss S. P. DuBose.
Fogg High School, Nashville, Tenn., Mr. E. J. Batty.
McTyeire Institute, McKenzie, Tenn., Mr. R. G. Peoples.
Mercer University, Macon, Ga., Professor W. H. Kilpatrick.
Mooney School, Franklin, Tenn., Principal W. D. Mooney.
People's and Morgan School, Fayetteville, Tenn., Principal R. K. Morgan.
Randolph-Macon Woman's College, Lynchburg, Va., Professor J. L. Armstrong.
Southern University, Greensboro, Ala., Professors E. L. Colebeck and D. P. Christenberry.
Southwestern Presbyterian University, Clarksville, Tenn., Chancellor George Summey.
Trinity College, Durham, N. C., Professor J. S. Bassett.
Tulane University, New Orleans, La., Professor Brown Ayres.
University School, Nashville, Tenn., Principal C. B. Wallace.
University of Alabama, Tuscaloosa, Ala., President W. S. Wyman and Professor C. H. Barnwell.
University of Mississippi, University, Miss., Professor C. C. Ferrell.
University of Missouri, Columbia, Mo., Professor J. C. Jones.
University of Nashville, Nashville, Tenn., Dr. H. A. Vance.
University of North Carolina, Chapel Hill, N. C., President F. P. Venable.
University of Tennessee, Knoxville, Tenn., Professors Charles A. Perkins and Cooper D. Schmitt.
University of Texas, Austin, Tex., President William L. Prather.
University of Virginia, Charlottesville, Va., Professors P. B. Barringer, W. H. Echols, and W. M. Thornton.
Vanderbilt University, Nashville, Tenn., Chancellor J. H. Kirkland, Professors F. W. Moore and H. Z. Kip.

Ward Seminary, Nashville, Tenn., President J. D. Blanton.

Washington and Lee University, Lexington, Va., Professor H. D. Campbell.

Webb School, Bell Buckle, Tenn., Dr. John M. Webb and Mr. W. R. Webb, Jr.

Dr. James K. Powers, Florence, Ala.
 H. B. Harris, Richmond, Va.
 Samuel Hixon, Chattanooga, Tenn.
 Bishop T. F. Gailor, Memphis, Tenn.
 Dr. J. S. Cain, Nashville, Tenn.
 Mr. R. I. Moore, Franklin, Tenn.
 Mr. J. S. Morgan, Franklin, Tenn.
 Mr. F. D. Smith, Franklin, Tenn.
 Mr. A. Byrne, Franklin, Tenn.
 Mr. T. H. Sneed, Franklin, Tenn.
 Mr. L. T. Muse, Franklin, Tenn.
 Mr. John Lyons, Franklin, Tenn.
 Mr. W. W. Newman, Franklin, Tenn.
 Mr. H. D. Harris, Franklin, Tenn.
 Mr. M. E. Whitefield, Franklin, Tenn.
 Mr. E. J. Hamilton, Franklin, Tenn.
 Mr. George Morris, Franklin, Tenn.
 Mr. H. O. Bridges, Franklin, Tenn.
 Mr. J. S. Rives, Franklin, Tenn.
 Mr. W. Moss, Franklin, Tenn.

ROLL OF MEMBERS

COLLEGES AND UNIVERSITIES

Institution	Location	President
Vanderbilt University.	Nashville, Tenn.	J. H. Kirkland, Ph.D., LL.D.
Univ. of North Carolina.	Chapel Hill, N. C.	F. P. Venable, Ph.D.
University of the South.	Sewanee, Tenn.	B. L. Wiggins, M.A.
University of Mississippi.	Oxford, Miss.	R. B. Fulton, LL.D.
Washington and Lee Univ.	Lexington, Va.	Geo. H. Denny, Ph.D.
Trinity College.	Durham, N. C.	J. C. Kilgo, A.M., D.D.
University of Tennessee.	Knoxville, Tenn.	C. W. Dabney, Ph.D., LL.D.
University of Alabama.	University, Ala.	James K. Powers, LL.D.
College of Charleston.	Charleston, S. C.	Harrison Randolph, M.A.
West Va. University.	Morgantown, W. Va.	D. B. Purinton, Ph.D., LL.D.
University of Missouri.	Columbia, Mo.	R. H. Jesse, LL.D.
University of Texas.	Austin, Tex.	William L. Prather, LL.D.

SCHOOLS

Institution	Location	Principal
Front Royal Academy.	Front Royal, Va.	W. W. Smith, A.M., LL.D.
Norfolk Academy.	Norfolk, Va.	Robert W. Tunstall.
Danville Military Institute.	Danville, Va.	Supt, I. H. Saunders.
Pantops Academy.	Charlottesville, Va.	John R. Sampson.
Union City Training School.	Union City, Tenn.	D. A. Williams.
Nashville City High Sch.	Nashville, Tenn.	A. J. Cavert.
Webb School.	Bell Buckle, Tenn.	W. R. and John M. Webb.
Sewanee Grammar School.	Sewanee, Tenn.	J. E. Leigh.
Elizabeth Training School.	Petersburg, Tenn.	W. E. Miller.
Fishburne Military Acad.	Waynesboro, Va.	James A. Fishburne.
Randolph-Macon Acad.	Bedford City, Va.	A. M. Hughlet, E. S. Smith.
Norfolk High School.	Norfolk, Va.	George McK. Bain.
Spring Hill Training Sch.	Spring Hill, Tenn.	Messrs. Branham and Hughes.
University School.	Nashville, Tenn.	C. B. Wallace.
Vanderbilt Training Sch.	Elkton, Ky.	J. H. Harrison.
The Mooney School.	Franklin, Tenn.	W. D. Mooney.
Abingdon Male Academy.	Abingdon, Va.	B. R. Smith.
Edwards Academy.	White Pine, Tenn.	Rev. J. D. Droke,
Agnes Scott Institute.	Decatur, Ga.	F. H. Gaines.
Wofford Coll. Fitting Sch.	Spartanburg, S. C.	A. Mason DuPre.
Randolph-Macon Institute.	Danville, Va.	W. H. Davis.
Jonesboro Training Sch.	Jonesboro, Ark.	F. R. Alexander.
Montgomery Bell Acad.	Nashville, Tenn.	S. M. D. Clark.
Millersburg Training Sch.	Millersburg, Ky.	C. M. Best.
St. Albans School.	Radford, Va.	George W. Miles.
Hogsett Military Academy.	Danville, Ky.	Charles M. Neel.
Peoples and Morgan Sch.	Fayetteville, Tenn.	R. H. Peoples and R. K. Morgan,
University School.	Knoxville, Tenn.	C. M. Himel.
Oak Ridge Institute.	Oak Ridge, N. C.	J. A. and M. H. Holt.
Starke University School.	Montgomery, Ala.	J. M. Starke.
McTyeire School.	McKenzie, Tenn.	J. A. Robins and R. G. Peoples.
Carlisle Fitting School.	Bamberg, S. C.	W. E. Willis.
University School.	Mobile, Ala.	Julius T. Wright.
Blackstone Female Inst.	Blackstone, Va.	James Cannon, Jr.
Alabama Normal College.	Livingston, Ala.	Julia Tutwiler.
Cluster Springs Academy.	Black Walnut, Va.	H. Wilson.
Washington Sch. for Boys.	Washington, D. C.	L. D. Hooper.
Newport News Mil. Acad.	Newport News, Va.	E. W. Huffman.

Institution	Location	Principal
Ward Seminary.	Nashville, Tenn.	J. D. Blanton.
Miss Gibbes' School.	Charleston, S. C.	Miss S. P. Gibbes.

SKETCH OF THE ASSOCIATION OF COLLEGES AND PREPARATORY SCHOOLS OF THE SOUTHERN STATES

The association was organized in the autumn of 1896 at Atlanta, Ga., at a meeting of delegates from a number of southern colleges and universities. Invitations to this meeting had been sent out by a committee appointed by the faculty of Vanderbilt University. The purpose of the meeting as stated, was:

1. To organize southern schools and colleges for coöperation and mutual assistance.
2. To elevate the standard of scholarship and to effect uniformity of entrance requirements.
3. To develop preparatory schools and cut off this work from the colleges.

On this basis an organization was affected and a constitution and by-laws were adopted. The following institutions were the charter members: Vanderbilt University, University of North Carolina, University of the South, University of Mississippi, Washington and Lee University, Trinity College.

OFFICERS OF THE ASSOCIATION

1895-6

President

PRESIDENT GEORGE T. WINSTON, LL.D., University of North Carolina.

Vice Presidents

PROFESSOR S. T. MORELAND, M.A., Washington and Lee University.

PROFESSOR T. W. PALMER, M. A., University of Alabama.

Secretary and Treasurer

CHANCELLOR J. H. KIRKLAND, Ph.D., LL.D., Vanderbilt University.

Executive Committee

(in addition to president and secretary, *ex officio*)

PROFESSOR J. H. DILLARD, M.A., D.Lt., Tulane University.

PROFESSOR W. P. TRENT, M.A., University of the South.

CHANCELLOR R. B. FULTON, LL.D., University of Mississippi.

1896-7

President

CHANCELLOR R. B. FULTON, LL.D., University of Mississippi.

Vice Presidents

PROFESSOR ADDISON HOGUE, Washington and Lee University.
PRESIDENT E. A. ALDERMAN, D.C.L., University of North Carolina.

Secretary and Treasurer

CHANCELLOR J. H. KIRKLAND, PH.D., LL.D., Vanderbilt University.

Executive Committee

(in addition to president and secretary, *ex officio*)

VICE CHANCELLOR B. L. WIGGINS, M.A., University of the South.
MR. JOHN M. WEBB, LL.D., Webb School.
MR. B. W. BOND, D.D., Randolph-Macon Academy.

1897-8

President

VICE CHANCELLOR B. L. WIGGINS, M.A., University of the South.

Vice Presidents

JOHN M. WEBB, LL.D., Webb School.
PRESIDENT JAMES K. POWERS, LL.D., University of Alabama.

Secretary and Treasurer

CHANCELLOR J. H. KIRKLAND, PH.D., LL.D., Vanderbilt University.

Executive Committee

(in addition to president and secretary, *ex officio*)

CHANCELLOR R. B. FULTON, LL.D., University of Mississippi.
PROFESSOR ADDISON HOGUE, Washington and Lee University.
SUPERINTENDENT H. C. WEBER, Nashville, Tenn.

1898-9

President

PRESIDENT CHARLES W. DABNEY, PH.D., LL.D., University of Tennessee.

Vice Presidents

PRESIDENT I. H. SAUNDERS, Danville Military Institute.
CHANCELLOR W.W. SMITH, LL.D., Randolph-Macon College.

Secretary and Treasurer

CHANCELLOR J. H. KIRKLAND, PH.D., LL.D., Vanderbilt University.

Executive Committee

(in addition to president and secretary, *ex officio*)

CHANCELLOR R. B. FULTON, LL.D., University of Mississippi.
MR. JOHN M. WEBB, LL.D., Webb School.
PRESIDENT JAMES K. POWERS, LL.D., University of Alabama.

1899-1900

President

DR. JOHN M. WEBB, Webb School, Bell Buckle, Tenn.

Vice Presidents

PROFESSOR EDWIN MIMS, Trinity College, Durham, N. C.

PRESIDENT I. H. SAUNDERS, Danville Military Institute, Danville, Va.

Secretary and Treasurer

CHANCELLOR J. H. KIRKLAND, Ph.D., LL.D., Vanderbilt University.

Executive Committee

(in addition to president and secretary, *ex officio*)

CHANCELLOR R. B. FULTON, LL.D., University of Mississippi.

MR. C. B. WALLACE, University School, Nashville, Tenn.

PRESIDENT JAMES K. POWERS, LL.D., University of Alabama.

1900-1

President

PRESIDENT JAMES K. POWERS, University of Alabama, University, Ala.

Vice President

PRESIDENT HARRISON RANDOLPH, Charleston College, Charleston, S. C.

Secretary and Treasurer

CHANCELLOR J. H. KIRKLAND, Vanderbilt University, Nashville, Tenn.

Executive Committee

(in addition to the president and secretary, *ex officio*)

CHANCELLOR R. B. FULTON, University of Mississippi, University, Miss.

PRESIDENT F. P. VENABLE, University of North Carolina, Chapel Hill, N. C.

PROFESSOR W. D. MOONEY, The Mooney School, Franklin, Tenn.

1901-2

President

PROFESSOR EDWIN MIMS, Trinity College, Durham, N. C.

Vice Presidents

PROFESSOR COOPER D. SCHMITT, University of Tennessee, Knoxville, Tenn.

PROFESSOR H. D. CAMPBELL, Washington and Lee University, Lexington, Va.

Secretary and Treasurer

CHANCELLOR J. H. KIRKLAND, Vanderbilt University, Nashville, Tenn.

Executive Committee

(in addition to the president and secretary, *ex officio*)

PRESIDENT F. P. VENABLE, University of North Carolina, Durham, N. C.

PROFESSOR J. B. HENNEMAN, University of the South, Sewanee, Tenn.

DR. J. M. WEBB, Webb School, Bell Buckle, Tenn.

PUBLICATIONS OF THE ASSOCIATION

"Proceedings of the First Meeting," held in Atlanta, Ga., November 26, 1895.

"Proceedings of the Second Meeting," held at Vanderbilt University, Nashville, Tenn., November 10-12, 1896.

Summary of papers on the following topics:

"Uniform Requirements for Admission to College,"

Chancellor R. B. Fulton, University of Mississippi.

"Weak Points in High-School Work,"

Professor F. W. Moore, Vanderbilt University.

"Preparation of the Teacher for High-School Work,"

Professor K. P. Harrington, University of North Carolina.

Principal H. C. Weber, Nashville High School.

"The Work of the Southern College Association,"

Professor William M. Baskerville, Vanderbilt University.

"Instruction of Freshmen,"

Principal W. D. Mooney, the Mooney School.

"Greek in the High School,"

Professor Addison Hogue, Washington and Lee University.

Principal W. D. Mooney, the Mooney School.

Vice Chancellor B. L. Wiggins, University of the South,

"The Public High School as Preparation for College,"

Professor George F. Mellen, University of Tennessee.

Superintendent James McGinnis, Owensboro, Ky.

"Proceedings of the Third Meeting," held at the University of Tennessee, November 2-4, 1897.

Reports of committees on entrance requirements in English, Latin, mathematics, Greek, history and geography, modern languages, science, with discussions of each report.

"Proceedings of the Fourth Meeting," held at the University of Georgia, Athens, Ga., November 1-3, 1898.

"The South, Past and Present,"

Professor Greenough White, University of the South.

"Homer in Schools,"

Professor Addison Hogue, Washington and Lee University.

Professor H. C. Tolman, Vanderbilt University.

"College Degrees,"

Mr. W. D. Mooney, the Mooney School.

President Charles W. Dabney, University of Tennessee.

"Continuous Sessions of Colleges and Universities,"

President Jerome H. Raymond, University of West Virginia.

"The Use of the Library in School Work,"

Mr. W. H. Bates, Smyrna Fitting School.

Miss Anne Wallace, Atlanta, Ga.

"Proceedings of the Fifth Meeting," held at South Carolina College, November 2-4, 1899.

- "Scientific and Technical Education,"
President Charles W. Dabney, University of Tennessee.
- "Requirements for the B.A. and B.S. Degrees,"
President Charles W. Dabney, University of Tennessee.
- Report on Course of Study for Secondary Schools,
Chancellor J. H. Kirkland.
- "Colleges and Preparatory Schools,"
President F. C. Woodward, South Carolina College.
- "Greek in Mississippi Schools,"
Professor P. H. Saunders, University of Mississippi.
- "The Teacher's Work and Influence Outside the Class Room,"
Professor Edwin Mims, Trinity College.
- "Admission to College on Certificate,"
Professor T. W. Jordan, University of Tennessee.
Mr. C. B. Wallace, Nashville University School.
- "The Unification of College Degrees,"
Professor W. S. Sutton, University of Texas.
Professor H. A. Vance, University of Nashville.
- "School Libraries,"
Dr. John M. Webb, Webb School.
- "Proceedings of the Sixth Meeting," held at Charlottesville, Va., November 1-2, 1900.
- "Our Proposed New Requirements for Admission to College,"
Professor R. W. Jones, University of Mississippi, University, Miss.
- "Should the Association in its By-Laws Forbid Preparatory Departments and Require Specified Entrance Examinations for Admission to College?"
Professor Addison Hogue, Washington and Lee University, Lexington, Va.
Professor R. W. Tunstall, Norfolk Academy, Norfolk, Va.
- "The Proper Limitation of Elective Work in School and College,"
Dr. C. H. Thurber, Cambridge, Mass.
Professor C. D. Schmitt, University of Tennessee, Knoxville, Tenn.
Professor George W. Miles, St. Albans School, Radford, Va.
- "Report of the Committee on the Unification of College Degrees,"
Majority Report, President Charles W. Dabney, University of Tennessee.
Minority Report, Professor W. S. Sutton, University of Texas.
- "Proceedings of the Seventh Meeting," held at Sewanee, Tenn., November 6-8, 1901.
- President's Address,
Dr. James K. Powers.

- "Laboratories and Science Teaching,"
Professor John P. Campbell.
- "The Public High School as a Preparation for College,"
Mr. E. J. Batty.
- "Substitutes for Latin and Greek in Admission Requirements,"
Professor F. W. Moore.
- Mr. W. D. Mooney.
- "Preparatory Training for Girls,"
Professor J. L. Armstrong.
- "The Problems of the Small College in the Southern States,"
Professor E. H. Babbitt.

PART I

MINUTES

OF THE SEVENTH ANNUAL MEETING OF THE ASSOCIATION OF COLLEGES AND PREPARATORY SCHOOLS OF THE SOUTHERN STATES

NOVEMBER 6-8, 1901

FIRST DAY

Wednesday Evening, November 6, 1901, 8 o'Clock

The association met at 8:00 P.M. in the library of the University of the South, President James K. Powers in the chair. Vice Chancellor B. L. Wiggins welcomed the association in well chosen words, to which President F. P. Venable responded on behalf the association. Dr. Powers then delivered his address as President of the association (p. 5). The secretary made announcements for the meeting of the association, which then adjourned to attend a reception given in honor of the delegates and visitors by Vice Chancellor and Mrs. B. L. Wiggins at Fulford Hall.

SECOND DAY

Morning Session, November 7, 1901

The association met at 9:30 A.M., the President in the chair. The treasurer presented his annual report, which was referred to an auditing committee consisting of Professors H. D. Campbell and H. B. Arbuckle.

TREASURER'S REPORT FOR 1900-1901

Receipts	Expenditures
Balance from 1900.....\$ 15.76	Jan. 17, 1901, Weil Bros., mailing envelopes\$ 3.00
Dues for 1899-1900, three institutions..... 15.00	Jan. 24, 1901, stamps 13.50
Dues for 1900-1901, thirty-six institutions 180.00	Jan. 26, 1901, express 2.70
	Feb. 8, 1901, Latimer Co., freight on Proceedings 2.04
	Feb. 8, 1901, University of Chicago Press, Proceedings 95.97
	Nov. 5, 1901, stamps 4.40
	Nov. 5, 1901, Marshall & Bruce, printing 8.60
	\$130.21
	Balance on hand 80.55
Total\$210.76	Total\$210.76

NOTE: Dues for 1900-1901 are still unpaid by twelve institutions; two institutions are counted out, not having paid for several years.

On motion the chancellor appointed Vice Chancellor B. L. Wiggins, Dr. John M. Webb, and Mr. C. H. Wallace a committee to nominate officers for the coming year.

The first question on the program was then taken up, viz., "Laboratories and Science Teaching." The paper of Professor John P. Campbell was read by the secretary (p. 16). The discussion was further carried on by President F. P. Venable, Professors Brown Ayres, E. J. Batty, E. H. Babbitt, and Professor P. B. Barringer.

The next question was then taken up, and Mr. E. J. Batty read a paper on the "Public High School as a Preparation for College" (p. 28). The paper was discussed by Dr. H. Z. Kip and others.

The auditing committee presented its report as follows:

To the Association of Schools and Colleges of the Southern States:

GENTLEMEN:—The committee appointed to audit the secretary and treasurer's accounts beg to report that they have carefully examined the accounts and vouchers presented, and have found them correct in every particular.

Respectfully submitted,

H. D. CAMPBELL,

H. B. ARBUCKLE,

Auditing Committee.

The third question was then called for, and Dr. F. W. Moore read a paper on "Substitutes for Latin and Greek in Admission Requirements" (p. 36). The general subject of entrance requirements was discussed by the association at the request of the executive committee.

The association then adjourned to meet at 8:00 o'clock P.M. with the E. Q. B. Club.

Evening Session, 8:00 P.M.

The association met in informal session with the E. Q. B. Club and heard an address on "Educational Ideals," by Bishop Gailor. Mr. W. D. Mooney then read his paper on "Substitutes for Latin and Greek in Admission Requirements" (p. 43). A very general discussion followed.

THIRD DAY

Morning Session, November 8, 1901

The association met at 9:30 A.M., the President in the chair. Professor J. L. Armstrong read a paper on "Preparatory Training for Girls" (p. 47). The subject was further discussed by Professors Ayres, Arbuckle, Webb, Mooney, and others.

Professor E. H. Babbitt read a paper on "The Problems of the Small College in the Southern States" (p. —), which was discussed by President Dowman, President Prather, and others.

Dr. F. W. Moore presented the following resolution, which was unanimously adopted:

Resolved, That the thanks of the association as a body, and of each and all the visitors and delegates to its seventh annual meeting, be and hereby are extended to the University of the South and its officers, and to the E. Q. B. Club, and to the families of this community, for the cordial and hospitable entertainment extended to us in so many ways. While these sentiments have also been expressed personally and informally, we desire hereby to make public record of them in our minutes.

Business Session

The business session of the association was called to order by President Powers.

The executive committee reported that the following institutions had been carefully considered, and were recommended for membership in the association :

Ward's Seminary, Nashville, Tenn., Principal J. D. Blanton.

Miss Gibbes' School, Charleston, S. C., Miss S. P. Gibbes.

University of Texas, Austin, Tex., President William L. Prather.

University of Missouri, Columbia, Mo., President R. H. Jesse.

All the institutions named were elected members of the association.

The executive committee further reported that it was the duty of each college or university to make an annual report to the secretary of the association, depositing with him a copy of catalogue and a copy of published examination papers. The secretary was ordered to make a report to the executive committee reviewing the work of each institution in the light of reports furnished him before October 1 each year.

On motion of Dr. Moore, the President appointed Professor J. L. Armstrong, Professor Thomas Ayres, and Professor H. B. Arbuckle a committee to consider further the subject of preparation of girls for college, and report at the next meeting.

Invitations for the next meeting were extended by the University of Mississippi, Washington and Lee University, and Trinity College. On motion, the University of Mississippi was selected, and the invitation for Trinity College was extended for 1903.

The committee appointed to nominate officers presented the following report :

1901-2

President

PROFESSOR EDWIN MIMS, Trinity College, Durham, N. C.

Vice Presidents

PROFESSOR COOPER D. SCHMITT, University of Tennessee, Knoxville.

PROFESSOR H. D. CAMPBELL, Washington and Lee, Lexington, Va.

Secretary and Treasurer

CHANCELLOR J. H. KIRKLAND, Vanderbilt University, Nashville, Tenn.

Executive Committee

(in addition to president and secretary, *ex officio*.)

PRESIDENT E. P. VENABLE, University of North Carolina, Durham, N. C.

PROFESSOR J. B. HENNEMAN, University of the South, Sewanee, Tenn.

DR. J. M. WEBB, Webb School, Bell Buckle, Tenn.

The inquiry of Washington and Lee as to the admission of irregular students of mature age, was referred to the executive committee for report next year.

The minutes were then read and approved and the association adjourned.

PART II.

PAPERS AND ADDRESSES

OF THE SEVENTH ANNUAL MEETING OF THE ASSOCIATION OF COLLEGES AND PREPARATORY SCHOOLS OF THE SOUTHERN STATES

NOVEMBER 7-8, 1901

PRESIDENT'S ANNUAL ADDRESS

DR. JAMES K. POWERS.

Mr. Chairman, Ladies and Gentlemen;

The human being, the child, if you will, has a threefold nature, viz., the physical, the intellectual, and the moral. Each requires development. There are many agencies interested in that development. Taken in like order, they are the parent, the state, the church. The two terms last mentioned are used in their broadest sense, the state as the symbol of government, and the church as the church universal. While all of these agencies are interested in the harmonious development (education) of the entire nature, each has its peculiar ground of obligation that grows out of the relations and terms used.

Primarily the demand upon the parent is for the supply of the means for physical development, but not solely so. In early life, the pressing, ever-present demand is for the means and facilities for growth—food, raiment, and shelter. This continues until the child is able to provide for his own necessities, at first in part only, under direction: and later in whole without such direction. Advising as to the selection of a vocation or profession and the training to fit for same, are parts of the parental obligation and responsibility. It would seem, therefore, that the parent should at all times have a deep and abiding interest in industrial education in all its phases.

The state, an agent of society for the protection of life, the fostering of property, and the maintenance of right, is most efficient, and indeed only capable of keeping pace with changing condi-

tions, when intelligently administered. This is especially true in this country, where every father as an adult male is a voter. With us, the intelligence of the governed is the measure of the efficiency of the government. Every voter should at least have a clear conception of his duties and responsibilities as such. An ignorant voter is a menace to our institutions. For self-protection, then, the state should train the intelligence of its prospective voters and of all who can be expected to wield an influence over them. In failing to stress at this point the necessity for virtue as well as intelligence, do not for a moment suppose that I underrate that important element of character in the citizen.

The church is society's agent for the moral government of the universe. It serves its purpose by developing the moral side of man's nature, thus placing him in harmony with the purposes of his Maker.

Primarily, therefore, but not solely, the child has a claim upon its parents for physical, upon the state for mental, and upon the church for moral development. One alone is not education. If such a thing were possible, a human being trained along but one of these lines would fall far short of that ideal towards which education tends. General Sir Garnet Wolseley, the great British soldier, is credited with the statement that he had personally known two heroes. One was Gordon of Khartum, and the other Lee of Appomattox. These were indeed heroes in the highest sense of the word. They were more; they were models of well-rounded character. Their deeds may in time be forgotten, but their examples will have left an influence in shaping the destinies of mankind. However much we may admire the dauntless courage exhibited at Santiago, or the prowess at Manila, we may not forget that the characters of the leading actors in those events have yet to be tried by the fiery furnace of time and experience, and that it is hazardous to undertake to write an epitaph of a living man. Were I called upon to select the man of my generation who appeared to most nearly approach the symmetrical Christian character, I rather think I would name that Grand Old Man, William Ewart Gladstone, the great English Commoner. He may be accepted as a model of the educated man in the highest and truest sense.

The undue development of any one side of our nature to the neglect of the others makes cranks. A little learning is truly a dangerous thing, but much learning is more dangerous still unless held in check by a properly rounded character. I can imagine no more dangerous combination than a thoroughly developed brain and brawn to the neglect of the moral sense. Knowledge is indeed power,

but it may be, often is, a power for evil rather than good. Fortunately we are so constituted that except in rare and abnormal cases it is impossible to develop one of these natures independently. Certainly it is not feasible to get the best results in any without favorably affecting the others. Herbert Spencer held to the doctrine that only the perfect animal had in him the possibilities of the perfect man.

Some held to the view that education increases crime. If this be true, it is a fearful arraignment of the quality and method of the article supplied. Though tables have been compiled that appear to bear out this view, I am unwilling to accept the conclusion reached. Figures do not lie, but the figurer often wanders from the paths of truth. True, crimes of certain grades and kinds cannot be but for some degree of education. But the criminal instinct is there, education but translating the manifestations from one sphere of action to another. Within my own observation, an uneducated wife-beater became a forger after a little schooling, but he was as surely a criminal as a wife-beater as he was as a forger.

Through the first of the agencies to which I have referred, the parent, we have *directly*, private education. So far as his own children are concerned, if pecuniarily able to meet the expense, he may entirely discharge his obligation through this channel. But even this will not, as some selfishly and fallaciously hold, absolve him as to his responsibility in the case of others. Properly construed, duty and self-interest alike demand that in concert with others, he should compel both the church and the state to furnish the necessary facilities for the education of the youth of the land. Another's son, if ignorant and vicious, is as surely a menace to one's interests as his own son.

The ground on which public education rests is not that of charity, in any form. If it were, it would be degrading to accept it when unnecessary. It is not based on the theory that the state owes all children an education. For it does not, any more than it owes them food and raiment. It is, however, based on the facts that property is created and enhanced by legislation; that legislation is in turn stimulated, supported, and encouraged by intelligence; that this intelligence, to be effective, must be universal; and that public education, directed and supported in whole or in part by taxation, is the only available means of cultivating universal intelligence. If, as indicated by this line of reasoning, property is created and enhanced in value by universal intelligence, surely it is under obligation to contribute thereto. And this is the ground of taxation for schools or public education.

The state educates, therefore, not as a favor or in discharge of any obligation to the individual, but for its own protection and perpetuity, an educated citizenship being essential.

If the property-owner submits to taxation for the maintenance of schools as an arm of the government for the purposes indicated above; he has a moral right to follow up the matter and demand that the money thus collected shall be made effective. This involves compulsory education as a logical sequence. This is no new doctrine. Twenty-three centuries ago Plato recognized the obligation upon the state, not only to educate, but to make that education compulsory as well. This is as certain to come as that public education will remain as a policy or principle of our government. Indeed, it has already come in older parts of our country. It will have here, as it has elsewhere, its limitations, adapting it to our surroundings.

By consent, there has been to some extent a division of labor, an apportionment of the work among the several agencies. Elementary training is left almost exclusively to private and public schools. Theological education is assigned to the several denominations, while professional education is largely given over to the state. As time rolls by, I opine that this accord will strengthen, and that any disposition toward a clashing of interests will be averted. But surely, when illiteracy and crime are so prevalent, there is no time for us to cavil about whose the duty may be. There is work in abundance for all, with no occasion for a quarrel in the doing of it.

I need not stop in this presence to consider at what point public education should end, and where the work of the private and denominational institution should begin. Suffice it to say that all are deeply interested both in the universality and in the efficiency of that training. The public schools lay the predicate for your work, as for all other higher education. It is a well-known fact that about the same proportion of those fitted for college actually enter college. If, therefore, we double the number fitted for college, there will be double the number to go to college and university. Hence, from only a selfish point of view, if I were engaged in a denominational institution, I would urge the greatest possible efficiency in our public-school work.

In the matter of higher education, the state is a partner of the individual and the church. In what I have already said, I have endeavored to show that there was no occasion for conflict between the several forces or agencies in this work. I now come to a phase of it that demands positive and aggressive coöperation. I refer to the shaping

of courses of study and the conferring of degrees supposed to mark their completion. No degree is conferred, no diploma issued, save by virtue of authority granted by the state. This privilege carries with it a corresponding obligation—an obligation that rests alike upon the state and the institution in partnership with it. Sad to relate, both partners have all too lightly regarded this obligation. Every general assembly has sundry bills brought before it chartering institutions of learning. These charters usually have a clause authorizing the conferring of divers and sundry degrees. In most cases these are local institutions, and, so regarded by the members, they pass as a matter of courtesy, as though the balance of the state had no interests involved. The right to confer degrees in the educational world is analogous to the right to issue money, and degrees may be properly styled the coin of the educational realm. A diploma has (or should have) a value, a commercial value, modified in each case by the personal equation of the holder. This fact alone makes it impossible to unify these values as in the case of bills. But that does not acquit the state of responsibility therefor. The degree of bachelor of arts conferred in one state should represent as much of age, maturity, culture, and character as when issued in another. Is it so? No, I say to our shame; it is not thus.

Degrees originally carried with them a license. A degree in medicine involved the right to practice medicine; a degree in law, to practice law; a degree in arts, to teach, etc. This last long ago lost its force in that respect, except when so provided by statute, but it received a compensating recognition as a badge of culture and scholarship. It admits (should admit) to a peerage of effort, a nobility of culture, an aristocracy of learning.

The true value of a degree depends upon what it represents in scholarship, effort, and culture. Bought, whether with money or influence, it at once becomes worthless as a title to that nobility to which I have referred. It is no more than a counterfeit coin in the educational realm. Like its commercial type, it places others of its kind under suspicion. If we know that there have been issued spurious A.B.'s, it places a ban on every A.B., unless one knows whence it came.

It is of the utmost importance that arithmetic, geography, and grammar be taught, and that they be taught well, more so, in one sense, than that philosophy and the humanities be taught. So it is more necessary that prints be made than broadcloth. But if the prints were branded and sold as broadcloth, it would be recognized as a fraud

of the first water. And yet institutions with high-sounding names and no adequate equipment are calling themselves colleges and universities, and granting degrees on such courses as I have described, or, worse still, on no courses at all. I have heard that a young man who had been in the sophomore class in an institution of my state—a real institution—received from one of these so-called colleges the degree of Ph.D.—a university degree he could not have earned at Harvard or Yale or Columbia or the Hopkins in five years. After teaching for a while and posing as a doctor, he went into another profession, I trust a wiser, if not a sadder man.

If the legislature should decree that the length now called a foot should be a mile, the dwarf of three feet would become a giant of three miles. But would that add one cubit to his stature? Or if it should decree that an ounce should be a pound, could my avoirdupois be increased by any such jugglery? Surely not. Neither can one's acquirements be increased by an unearned, undeserved degree.

If all the states had the authority to coin money, and if each chose a standard of its own, confusion would reign in the commercial world. A diversity of standard weights and measures would result in like confusion. But is that any worse than the confusion into which we are thrown by allowing all sorts of institutions, and institutions that have only names (without local habitations) to confer degrees and issue diplomas? This is a matter of great importance to all. To colleges and universities, it is of the very first importance. If possible it is more important still to the victims of such frauds. The young man is dazzled by the sound of some great degree. He knows some one who has spent years of toil and great treasure in securing it, and to whom it is of great value. He finds some institution that, for a few dollars, will confer it upon him. He forthwith imagines that it is on account of his superior merit or ability, and before he learns to his cost that it is a fraud, the time in life when he could have made anything of himself has passed. His life is therefore wrecked.

This association cannot directly correct this evil. But by upholding proper standards we can educate public opinion and in time force careful legislation. That is what we should all set our heads upon. After a while spurious degrees, like counterfeit coin, will be detected. But in the meantime they will have entailed loss and shame on the victims.

Within the last three years I have had this matter impressed upon me in a very forceful way. I have had two letters that offered what I

considered direct bribes for degrees. One stated the amount, reading substantially as follows: "For the degree of Ph.D. from the University of Alabama, at the approaching commencement, I will pay to any interest you may name the sum of \$500." Note the shrewdness of the wording. If I had attempted to expose the party, he would have said he had no idea of giving the money to me, but for the founding of some medal or for aid to some weak department. The other was like unto it, save that it offered to pay to any interest designated by me such sum as I might name up to \$500. Both of these letters came from abroad; one from England and the other from the continent. From their similarity I presume the writers had been coached by some one who had similarly purchased an American degree. I have recently had correspondence with a party in an eastern state who desired similar favors. The degree he wanted was doctor of divinity. When advised that I could not assist him, he wrote that he could get what he wished from an institution near by, and not 1,000 miles from where we now are. Fortunately he wrote from a point where I have an intimate friend, and I investigated him a little. I learned that he was a pastor of the sensational order, that little was known of his antecedents, that he claimed to be a Spaniard, but it had been hinted in the press that he was a negro. This latter I am inclined to believe from some manifestations that came out in the correspondence.

It is understood that American institutions have been criticised in the English Parliament for selling degrees. So far as I know their own institutions are not open to anything approaching like corruption. Not so with the Germans, who joke us about such things. I hear that, knowing our American fondness for doctorates, some of the German universities have one standard for American candidates and another for Germans applying for the same degree.

The trouble has grown in large measure out of the multiplication of colleges and universities which had no equipment, no endowment, no reason for existence except the gratification of the greed for gain, or a sense of local pride, or to satisfy the ambition of rival church organizations. In the West some years ago, when all other boom rackets failed, some one would buy, a few miles out of a prosperous city, a tract of land, cut it into lots, with a site for a college or university near the center, christen that, grade streets, advertise a land sale, begin the erection of a building, and gather in the shekels. This plan invaded Alabama a few years ago, and as a result one of the handsomest single school buildings in that state was erected. It

stands today a monument to the enterprise of its projectors. Having cost well nigh \$75,000, it has not brought its owners a cent of revenue. But it served its purpose. It sold lots (and purchasers as well). In other cases colleges and universities were chartered that had no sort of equipment or endowment. In one case it is said that a university with a distinguished name was chartered whose only property was a two-roomed frame building. After the adjournment of the legislature, a member of the lower house was chosen president, taught a three months' school at \$40 a month, had his board of trustees confer on him an honorary degree, and departed for parts unknown. It is said that another "university" advertised in flaming headlines about as follows:

"——— University. Prepares young men for college." Think of a university preparing young men for college! Would that the fires from heaven would consume all such universities.

There are about 12,000 bachelors' degrees conferred in this country annually. It is safe to say that half of them are unearned and undeserved, if we may be permitted to judge from what we know about institutions in our own and neighboring states. In his annual report for 1895-6 (the last available), the commissioner of education names 472 colleges and universities that have the power to confer such degrees upon men. This list, the pick of American institutions, does not include half of those in America that have the chartered right to confer degrees. The commissioner has omitted many from his list for satisfactory reasons. But many unworthy ones have slipped past his watchful eye. Now, it is an accepted fact that the right to confer these degrees should be limited to institutions that have an income and equipment adequate to insure the work that should entitle one to such a degree. It is said that one county in the South, not a very rich or populous one, has four chartered colleges, all in full blast as degree mills. If you were to modestly suggest the impropriety of their conduct to them, they would gravely refer you to their courses of study as printed in their catalogues, all unmindful of the fact that a thousand catalogues can be had at the rate of a dollar a page, purchaser to furnish the copy and no questions asked.

Permanence should be the first consideration in the matter of chartering institutions with the power to confer degrees. To that end, a home is necessary — buildings and grounds, not mere shacks, but edifices that promise to endure for generations. Next in importance comes equipment, consisting of museums, laboratories supplied with

apparatus for experimentation (by students) and illustration (by professors), libraries for reference and circulation, general and departmental. These require capital. Next in order comes the faculty of specialists, able and consecrated. This necessitates an income steady and reliable. Such can only be had through either an endowment or an assessment. The former source is greatly to be preferred, if not essential, as I am disposed to believe. A tax levy is often cut by hostile legislation, while assessments are uncertain and unsatisfactory.

With such a combination, and with such only, can adequate work be done on which to predicate a college degree. Let us briefly examine Dr. Harris's list, at least as far as relates to our own and neighboring states.

Alabama was credited with nine. Four had libraries aggregating 900 volumes. Two had scientific apparatus aggregating \$100. One with neither endowment, library, nor scientific apparatus, had buildings and grounds valued at \$4,500, an income of \$2,100, six teachers and over 200 pupils. Think of six teachers who can be hired for \$350 a year having power to confer degrees!

Arkansas reported nine, six of which had no endowment. Several had practically neither libraries nor laboratories. One with a total income (as reported) of \$900 had nine teachers and 290 pupils. That must have been a kindergarten.

Georgia reported eleven, several of which had libraries ranging from 0 to 150 volumes, and apparatus ranging from \$0 to \$400. One with 150 volumes, \$1,000 worth of apparatus and \$2,000 worth of buildings and grounds, no endowment, and a total income of \$1,000, had three teachers and 105 pupils.

Missouri added twenty-five to the list, five of which reported libraries aggregating 2,500 volumes, and four scientific apparatus less than \$1,500.

North Carolina reported five without productive income. Several were practically without libraries or laboratories. One with a total income of \$1,500, had seven teachers and 114 pupils.

South Carolina had four without endowment. One with a total income of \$1,500, had six teachers and fifty-nine pupils.

Judged by any reasonable standard, these six states would have, instead of ninety-six institutions authorized to confer the bachelor's degree, little, if any, over thirty. Under these circumstances, what is to be done? Shall we sit idly by and see our young men debauched by cheap degrees, and our institutions of learning made sport of by

thinking people, and, though unable to defend them, make no effort at reform? I answer, No?

How, then, shall we proceed? Shall we ask the legislature in each state to stand as a bulwark against increasing the list of degree-conferring institutions without an adequate guarantee of efficiency? That would be well, but we should do more. We should ask for the establishment of a standard, and require all institutions to come up to the minimum as a prerequisite to conferring degrees. Just what that standard should be, it is not for me to arbitrarily say. I merely suggest for your consideration a minimum of resources, plant and endowment, of \$100,000. In New York and Pennsylvania the minimum is \$500,000 devoted exclusively to educational purposes. Surely one-fifth of that sum is low for us, but it is a long way better than our present chaotic conditions, with no standard at all. The states mentioned have official boards that have control of such matters. The Board of Regents of the University of the State of New York is more than one hundred years old, and has done for that state a great work in elevating the standard of college and university education. It would seem that the time had come for the establishment of some such tribunal, and for requiring existing institutions to conform to the requirements established within a reasonable time, or go out of the business, and all new institutions to line up before receiving their charters. Think not that such a movement would cut off any worthy institution now below the standard that might be adopted. To such, it would prove a blessing in disguise by stimulating their friends to activity. This would be the case with every one that had a valid reason for existence. Others would not drop, but remain below the line, and go on doing excellent work, but it would be known by its true name and character as high-school work. Some have thought that the development of the public schools of the South sounded the death knell of the antebellum private high schools. Not so. It was the rise and reign of the shoddy college that impaired those noble institutions. Restored, they would serve admirably as a connecting link between the common schools and the colleges, and would relieve us of the reproach of having whole counties that scarcely have a school within their borders capable of fitting young men for college.

To summarize, no college degree should be conferred except on the completion of a four-year course predicated on careful fitting for the same. University degrees should represent advanced work, including at least one year in residence for the master's (whether of arts or of

sciences), and three for a doctorate of philosophy. When they represent less in effort and requirement they are mere shams, and the time will come (if indeed it is not now at hand) when self-respecting men will be ashamed of them. Honorary degrees are properly conferred, and only so, in recognition of distinguished work or merit. Thus bestowed, institutions honor themselves in conferring them.

Lest any think these suggestions radical, I beg to remind you that I deem myself in excellent company, for Chancellor Kirkland has recently prepared an able and elaborate paper along the same lines, making similar suggestions. On that paper I have drawn freely in the preparation of this, without taking time to go to original sources for my facts.

Let it not be supposed that the South has a monopoly in either shoddy colleges or fraudulent degrees. Indeed, in some sections of the country they have reached a depth of iniquity (in the sale of degrees) to which I trust we will never descend.

In conclusion, I have no purpose to go here into the details concerning the necessary legislation. Suffice it to say that, if wisely shaped, there would speedily follow a well-articulated educational system from the kindergarten to the university, not as a dream, but as an accomplished fact, with private and denominational and state institutions all working in harmony.

This association is now six years old. In addition to many valuable and well-digested papers on isolated subjects, it has spent most of its time on the consideration of three important subjects. In its early sessions it formulated a tentative course of study for preparatory schools, but so far as I know, there was never any thought that this should be more than suggestive. Next, for about two sessions, it studied the existing requirements for the bachelor's degree in the several colleges comprising its membership, comparing these with those of institutions in other sections. During the past two years much time and labor have been devoted to a scheme of requirements for admission to college. This important subject comes up for further consideration at this session. In my opinion, it merits all the attention it is receiving. Beyond question, it is proper for the association to set forth what it believes should be minimum requirements for admission to college in this territory. But I gravely doubt the wisdom of barring an institution from membership merely because it fails to meet some requirement for admission that we deem wise. To be perfectly clear and frank, I do not favor the policy of longer

isolating a leading southern institution which, judged by any reasonable standard that can be set up for its work, is the peer of any in the association, merely because, hedged by tradition and environment, it fails to meet our ideas on a particular point. Holding to our views on the importance of guarding the portal, let us honor that institution for its scrupulous care in looking after the exit. By all means, then, let us waive the point of entrance examinations (if necessary), and welcome such an institution to our fold, and thus have in future the benefit of its counsel, its wisdom, and its leadership.

THE PLACE OF LABORATORIES IN A LIBERAL COLLEGE COURSE

PROFESSOR JOHN P. CAMPBELL, University of Georgia

There is no single question on which the minds of educators have been more concentrated in recent years than the development of better methods for teaching the natural and physical sciences. There is no field in which a greater revolution has taken place, and in which the same number of years of agitation has brought forth more fruit. Not only is this true of the improved instruments and apparatus for instruction and demonstration, but it is also seen in the increased recognition of the educative value of scientific work, and the necessity for some of it in any well-rounded course of study. There is a new realization of what can and should be accomplished by scientific study, and a new idea of what the real objects of such work are. The time is not very far behind us when our leading colleges more or less grudgingly allowed a small amount of time for courses in science, in which text-book and recitation played the principal part. Now there is no institution of any consequence anywhere that does not undertake to provide a certain amount of real science teaching, and it is possible, in some very progressive institutions, for a student to receive the bachelor of arts degree on the completion of a course of study in which the student's best and most prolonged effort has been concentrated on a few scientific studies.

The subject of method in science teaching touches every stage of education, from the kindergarten to the university. It enters into every question of sequence and coördination of studies. It has to do with college entrance requirements; with the make-up of courses for degrees; with the relation of college to professional school; with

the organization of faculties; with the expense of conducting the institution—in short, there are few problems of college management from which it is altogether lacking. It will therefore be impossible to treat the subject without reference to several of these nearly related matters.

We are concerned especially with the proper methods for science-teaching in a liberal college course—meaning by this, scientific work designed primarily for mental discipline and culture—and of that degree of advancement which adapts itself to the maturity of the average college student. We are not concerned particularly with the methods of technical schools, or with any methods which are designed primarily to produce a high degree of technical skill, but only with methods which are designed to produce the greatest amount of mental development.

Let me say at this point that I have no thought in anything that may be brought out of undertaking to array the sciences against the classics. I have no sympathy with the position taken by those who would banish Greek from our educational schemes. I recognize many roads to culture, and all that I ask is that each be accorded that consideration which its real merit justifies.

We are to consider, then, the condition of science-teaching in the colleges of the South, especially with a view to seeing whether we are making as much as we should out of this part of our work.

We may first ask what place, if any, should science occupy in a liberal college course? If we were to say that a liberal education consists of mental training only, we would err by understatement. A certain store of information is also involved. It is the duty of the college to transform the immature boy into the cultured man by a discipline of his native powers, but it has the further duty of furnishing any information which is of material importance in enabling the student to adapt himself to the complex conditions of life. These conditions vary, and the college must keep itself in harmony with them. Subjects that were once important may now be thrown into the background.

The bachelor of arts degree has a special interest attaching to it because of its age and the changes through which it has passed, as denoting the changing idea of a liberal education. The time was when one year's study of Aristotle was considered a liberal education. With the revival of learning, Latin and Greek were added, in the face of much opposition, and somewhat later mathematics was added in

England. Fifty years ago the college curriculum in vogue was little beyond this. The disciplinary idea well-nigh excluded all else. The student was not encouraged or even desired to be an original investigator. He was nowhere brought in contact with the original source of knowledge, and his work was practically all deductive. We cannot help respecting this old course, much as we may be sensible of its inadequacy. The Latin, Greek, and mathematics generally ran through the four years of the college course, and there were entrance requirements to be met before the college work began. To certain types of mind this course represented a high degree of culture, but there were many to whom it meant but little. There were men who were in no way inferior who found more inspiration in the study of the present than in the past; who took more delight in the study of the world around them than in the study of antiquity.

President Jordan, of Leland Stanford Junior University, tells of a prominent naturalist who, as a student, was dropped from college because he wasted so much time studying birds, and neglected his studies. He adds: "That college had no use for bird knowledge, but it came out strong on irregular verbs." Such was the general attitude of the colleges up to a period not very remote, and it may be questioned whether it is not the attitude of some even now.

But outside of the colleges there were master minds, that were being devoted to the study of nature. While the work of the eighteenth century consisted of exploration and discovery rather than a deep penetration into the secrets of nature, still, in the hands of these men, such knowledge as was possessed began to be reduced to a form where it had some pedagogic value, and we find a demand springing up for scientific courses to be admitted to the colleges. Indeed, even before the demand became at all general, a few innovations of this sort were made. The first that I have found any account of was the establishment of a professorship of chemistry in the "College of Philadelphia" in 1768. The next year a similar chair was established in the Philadelphia Medical School. William and Mary followed in 1774. Columbia established a professorship of chemistry and natural history in 1792, and a professorship of botany in 1795. In 1795 Princeton also established a chair of chemistry, while in 1802 Silliman began his work at Yale.

We must remember that at this time the colleges generally had little or nothing to do with investigation, and the leading investigators of the time were not connected with the colleges at all. Such

men, however, often gave popular lecture courses, which must not be lost sight of. Although undertaken to stir up popular enthusiasm, rather than for education as we now understand it, such work must be given its proper place in the evolution of our present methods. Natural history subjects were especially popular, but inasmuch as the prevailing work was the search for new species, so the teaching emphasized the same thing, and the student who had memorized the number of known species in a large number of genera, and could give off-hand the names of a large number of plants, was regarded as well started on the road to fame. In other branches of science there was even less communion with nature. In chemistry and physics, the text-book was generally the final court of appeal, and the method of question and answer, with a very occasional lecture-table experiment or demonstration, constituted the method.

About the middle of the last century a decided change began to manifest itself. For this change three men who were working together at Harvard are largely responsible. Dr. Gray, almost from the beginning of his work there in 1837, required his students to study plants rather than books, and insisted that a book study of botany was of no value. Professor Cooke fitted up the first chemical laboratory for students in America in 1850, and by 1857 he had succeeded in having laboratory work made a requirement for certain classes of students.

Great as was the influence of these men, it was circumscribed in comparison with that exerted by Agassiz. Coming to this country in 1846, fresh from contact with the master minds of Europe, his own mind richly stored with the accumulated knowledge of nature, recognizing with clear vision the relation of known and unknown, filled with enthusiasm for research, trained in the methods that had just begun to bring forth rich fruits in Europe, possessing a magnetic personality that gathered mature students around him and injected into them some of his own enthusiasm, his influence upon the teaching of biology in particular, but other sciences also, can hardly be over-estimated. These men whom he trained have been recognized, many of them at least, as the best workers this country has produced, and they have gone all over the country, using the same methods, upholding the dignity and importance of their field of work, and helping to educate public opinion as to its value.

When and where the bachelor of science degree was first given I have not been able to determine. It appears to have been at first a purely technical degree, and afterward to have been taken up by the

colleges. It seems, however, to have taken a long time to win its way into favor. Founded upon the idea of the equivalence of culture values between the languages and sciences, the degree was especially popular with men who wished to escape the drill of Latin and Greek, and get a degree on easier terms. And this is not to be wondered at. The sciences as they were generally taught thirty or forty years ago were not equal in culture value to Latin and Greek, and it is only since the colleges have realized that it is not the Latin and Greek that gives value to the bachelor of arts course, but the culture that comes from their study, and also that the sciences are commonly not taught in such a way as to secure the culture that they may give, that a change has begun to manifest itself.

A most important step in the development of the scientific work of our colleges was taken when the Morrill Act went into effect, and schools of applied science began to be established all over the country. When these were connected with institutions already existing, their influence was most marked. They seemed to give definite rights to science courses that had previously been merely tolerated. Laboratories began to be built on a larger scale than ever before, and special attention began to be given to working out methods for conducting laboratory instruction to the best advantage. This activity had a profound effect on the bachelor of arts course. Not only do we find a demand for the admission of new subjects into this course, but we find new methods of teaching called for. We find the claim asserting itself that some real scientific work should enter into every bachelor of arts course; that it should be given for culture and not merely for information. This, of course, involved the student's going into the laboratory, examining his own material, dissecting his own animals or plants, mixing his own chemicals, often constructing his own apparatus, drawing his own conclusions, and writing up his own results. In short it was claimed that the student be made an investigator, rather than a receptacle, if the work was to be of any real benefit.

But this brought with it new problems. When the memorizing of the text-book represented the whole mental work of the student, a comparatively short time enabled a student to get all that was commonly given him. Moreover, it was not necessary that the teacher should have any exhaustive knowledge of the subject that he was teaching. With the growth of the sciences, and the more exacting methods for teaching, came the demand for better equipped teachers, and the professor of natural science began to give way to professors of chemistry, physics, biology, etc.

The colleges then had forced on them the double problem of arranging for the admission of new courses, and providing a great increase in the time allowance of some that might already have been there. How was this to be done in a course which already gave the student all the work that he could comfortably carry? These new studies were in many places admitted first merely as extras, in the face of much opposition, while Latin, Greek, and mathematics continued to form the backbone of the courses. Then, owing to demands for increased recognition, time began to be taken from these subjects and divided among the new ones.

This was a distinct step backward. It lost sight of culture altogether. It surrendered thoroughness in a few subjects, and replaced it by a smattering of many. Work was crowded into four years that would have required ten for its proper performance. No special idea seemed to underlie this plan, and on looking at some of the schedules constructed on this plan that still survive, it is hard to keep from thinking that each professor was simply grabbing for what he could get, and that the most clamorous got the largest share.

The third phase of development came with the gradual adoption of the elective system. Since its introduction at Harvard in 1867, as far as courses for degrees are concerned, this system has gone all over the country, until in some form it has been adopted in all institutions of any size.

An epoch in the development of educational methods began when the Johns Hopkins University commenced its work in 1876. Recognition was given to the principle of equality of culture value in a way that had never been done before. Seven groups of studies were devised, each aiming at marked thoroughness in two, with a less exhaustive study of a small number of others. One point that concerns us now is that the two studies might be both scientific studies or both languages. In either event they were studied through the same length of time, and believed to have the same culture value. It is to be noted also that there was not a group from which scientific studies were lacking. The student taking the most severely classical course was required to take at least one year of chemistry, or physics, or biology, in which he worked in the laboratory side by side with the man who had a scientific career before him. It mattered not what choice was made, the study chosen had to be pursued by methods from which culture was to be derived; by which the student's mind was brought to bear on the facts of the science, as he had himself observed

them; and by which he could get some appreciation of the way in which the science itself was originally built up.

I would call attention to another point also, the recognition of the fact that the colleges are but a stage in the development of many students, and must therefore be coördinated with something lower and higher. For a large proportion of students, the college is the preparatory school to the university as represented by some of its faculties, and whereas the older institutions had regarded Latin, Greek, and mathematics as making the best preparatory course for any profession, this institution urged the prospective lawyer to concentrate on history and economics, the prospective minister on Latin and Greek, and the prospective physician on biology and chemistry, and they recognized each group of studies as having the highest culture value for the class of students for which it was intended.

Thus, as the result of a steady growth in which sounder pedagogic principles have been developed and put into practice, and in which all the leading institutions of the country have had a share, we find certain methods of science teaching beginning to take on definite form, and advocated so zealously as to discredit any science teaching that is attempted in any other way. These methods involve much time, trouble and expense. In what does their value consist? What is the benefit to the student from exercise in these methods, and would their absence from a course of study leave a void that cannot be filled by anything else?

The student who attempts to learn chemistry or botany from a book is in the position of a person who tries to derive all the advantages of a European trip from a guide book. In such work he is called upon simply to memorize the contents of a book. He does get a certain amount of information, it is true, which he treasures carefully until the examination. None of this, however, is first-hand information. He can give reasons for nothing. He has had a certain amount of memory training, but his mental habits and his general way of looking at things around him have not been influenced in the least. After the facts have been forgotten he is in no way better off than before. Indeed, he may be somewhat worse off, for unless special care has been taken to prevent it, he is sure to be left with false ideas of the sources of knowledge, and with undue reverence for authority.

How is it with the man whose knowledge of science has been in great measure gotten in the laboratory, assuming the work to have been properly done, and properly coördinated? He has been called upon

to make constant use of his power of observation. By this I have reference not merely to keenness of sight, but rather to that mental keenness which carries with it the ability to concentrate the attention on what is observed so as to form a definite and lasting impression. The thing studied has a positive reality, it has been seen, felt and handled, and the mental reaction it has called forth has been correspondently measured. He has also been brought into contact with the original sources of knowledge. Every animal or plant observed, every chemical reaction studied, is a discovery so far as the student is concerned. He is not dependent on others for this knowledge. It is his own in a sense, not true of any other line of study.

He has also, if the work is properly conducted, been led to rediscover many laws. The inductive methods by which the sciences have been built up to their present condition are methods that I believe can nowhere be used to better advantage. Of course I recognize that the language teacher has abundant opportunity to make use of these same methods, but it seems to me that the student never acquires quite the same reverence for law in any other way that he does when he has had considerable practice in inductive methods for which facts that he has himself observed furnish the basis. It may be that the proverbial list of exceptions to grammatical rules is in the way of the best results in this line. Whatever be the cause, the effect has been frequently observed, for example, Helmholtz, after long experience with students taking up medical work after the gymnasium course, says that as a rule, they "show a certain laxity in the application of strictly universal laws" and that they are "too much inclined to trust to authority even in cases where they might form an independent judgment."

Another point of great importance is that the student has been put into direct communication with the best thoughts of modern times. None of the natural sciences is yet completed. The past seventy-five years has seen the greatest strides ever made. First, because there has been a fuller recognition of the fact that nature contained subjects more worth studying than ever before, and then because a larger part of the intellect of the world has been occupied with their study, than at any previous time. The greatest intellectual revolution of modern times has resulted from the discoveries of modern science, to say nothing of the economic revolution which the application of these methods has made possible. The discoveries, the methods, and the language of science have invaded literature of almost every kind, even to light fiction. Now I do not

for a moment claim that the discipline of the different subdivisions of science is the same thing. I do claim that they differ from each other far less than they differ as a whole from anything else. Accepted ideals of culture have differed in different ages, not so much as to the end, as to the means employed to attain it. Culture has always been the end of a liberal education, and in recent times external conditions are fixing new standards. Breadth of view, breadth of sympathy, sound judgment, self confidence, self reliance, the ability to extract knowledge from the series of phenomena passing before us in endless change, all these things help to distinguish the educated man. In the light of mental exercises above referred to, is it not evident, that the modern methods of science teaching, if properly carried on by the student will help him in the attainment of these ends, in a way that is not duplicated by anything else?

I am not urging now, quantity, but quality. I am not urging the claims of any particular branch of science for increased recognition, but rather increased recognition for true methods, and increased disregard for those that are false. I am not urging the sciences to the exclusion of anything else, but I am urging that they be accorded the place that their importance and culture value justify. As to the amount of science study proper for a bachelor of arts student let it be decided by the degree to which it calls forth a healthy mental reaction. But whether much or little is done, let it be done in recognition of the truth so admirably summed up by Huxley :

The great benefit which a scientific education bestows, whether as training or as knowledge, is depending upon the extent to which the mind of the student is brought into immediate contact with fact, upon the degree to which he learns the habit of appealing directly to nature, and of acquiring through his senses concrete images of those properties of things which are and always will be but approximately expressed in human language.

If these are the proper ideals for the teaching of all branches of science to all students, how is the work done in our southern colleges to be estimated? How does it compare in extent and quality with that done by colleges in other parts of the country? Of course I can answer that question only in the most general terms, and nothing more than this is desirable at this time.

A study of the catalogues of most of our leading southern colleges shows that they are beginning to realize the obligation to strengthen their methods of science teaching. There is a singular unanimity in the recognition of chemistry as the one scientific subject in

which a laboratory is especially desirable. As to courses given there is a very fair number that offer courses in general chemistry occupying three hours per week, with four hours additional for laboratory work. It is further worthy of note that in nearly every case the work done, is designed to give the student a broad and comprehensive idea of chemical action in general instead of the work in qualitative analysis which used to furnish the introduction to chemical laboratory work, and which invariably left on the student's mind the impression that no cases of chemical action were important unless they formed colored precipitates. We find in many places courses in qualitative and even quantitative analysis also for which occasionally as much as nine hours per week are allowed for laboratory purposes, but these are nowhere introductory courses, so far as I have observed. While this is true of chemistry in a very large proportion of our southern colleges, what can be said of the equipment for teaching other branches of science? How many physical laboratories are there worthy of the name, to which bachelor of arts students have access? How many geological laboratories are there? How many physiological laboratories are there outside of a few beginnings in normal schools? We find courses offered in all these subjects; what must we think of them as serving to give students any idea of the real state of the science, and put them in sympathy with their methods?

Next to chemistry, biology in some of its branches seems to have most general recognition. So far as I know, there is not a college in the south that devotes an entire building to this subject. There are a few that have a part of a comparatively new building planned for this purpose, but the great majority of biological laboratories in the South consist of cast-off quarters, originally designed for something else, refitted as well as possible, supplied with a few microscopes and some little accessory outfit. Of course good laboratory work is possible over a limited field, under such circumstances. The anatomical study of plants and animals can be carried on to a very considerable degree with little more than this, but the difficulty is everywhere felt of getting a sufficiently large number of duplicates to supply each student with what he needs. A compound microscope, and a dissecting microscope for each student is something that probably no laboratory in the south possesses. But even this is by no means all that is to be desired. To give meaning to any course of biological study, some provision must be made for the study of living forms, and where is the southern institution that is really equipped for offering courses in plant physiology,

to say nothing of animal? Where do we find greenhouses and botanical gardens designed primarily to promote the educational side of the subject? Where do we find the instruments of precision that are necessary if this work is to take on an exact character? Courses in animal physiology are very common, but they are as a rule information courses pure and simple. I have not seen anything to justify the belief that there is a southern college equipped with the apparatus for enabling the student to investigate the workings of his own body, and there seems to be not one that is utilizing this subject for purposes of training in scientific method.

Looking over the field in this hasty way, some grounds for encouragement are to be seen. Certainly there is an increasing recognition of the culture value of sciences properly taught. Each college has to adapt itself to its own peculiar environment. Each has its own problems to solve and its own ends to meet. And when means are very limited it is unquestionably far better to equip one laboratory and have good honest work done in it, than to attempt to fit up two or three and advertise courses that cannot possibly be adequately provided for. It is most encouraging to note that there are a few of our institutions that have steadily resisted this temptation, and are offering scientific work only in those subjects which they are prepared to teach properly.

The expense of conducting scientific work does present a serious difficulty, not nearly so serious now, however, as was once the case. I do not speak with the same knowledge of equipping a chemical and physical laboratory, but it is certainly true that a fairly well equipped biological laboratory can be provided for a very much smaller sum than could have been possible a few years ago. Ten years ago it was not possible to purchase physiological apparatus in this country at all. Much of the imported apparatus was made with the utmost precision for research, now much is made in this country for student use at a greatly reduced price. The only kymograph that could be purchased ten years ago cost \$125. Now that amount will purchase ten well made instruments in every way suited for anything the student of physiology could be called upon to do with them. Another unavoidable expense results from the fact that the number of students that can be handled by one teacher in a laboratory is very limited. Fifteen beginners is as large a class as one instructor can ordinarily handle satisfactorily.

I have often heard teachers in other lines express the view that the

real teaching was done in the class room, and that the laboratory was only a sort of accessory, but my experience at least is that the very hardest teaching I am ever called upon to do is in the laboratory. I know that there are occupants of scientific chairs who entrust most of their laboratory work to assistants, but I regard it as a most fatal policy, unless the assistants are unusually well-equipped men. I believe the proper policy, for most of our southern colleges is to provide a number of young, energetic, and it may be inexperienced assistants, for each laboratory, the number depending on the number of students to be looked after. Then no class should be divided into sections, but meet all at once, under the directions of the head of the department, with the help of the assistants provided. I do not believe generally in the appointment of tutors in a college from which they have graduated the year before, but I do strongly believe in the policy referred to in connection with scientific work. Young, inexperienced men can do valuable work in a laboratory without having too much responsibility resting on them.

Another difficulty in the way of developing laboratory work in our southern colleges, is found in a common failure to appreciate it rightly. The idea is still somewhat widespread that a laboratory training means an early specialization that is in conflict with a proper breadth of view. Then, too, there are some who take the ground that the actual results of laboratory work do not come up to what its advocates claim for it. With regard to the first point, it need only be stated that with increasing pedagogic enlightenment it is passing away. Breadth of view is coming to be less and less confused with a smattering of many subjects, and thoroughness is seen more and more clearly and to be a very different thing from narrow specializing. With regard to the second, it must be admitted that there is as much poor teaching in laboratories as in class rooms. There are as many unsuccessful teachers in the sciences as there are in languages and mathematics. There are laboratories in charge of men who do not conduct them properly. Students are sometimes allowed to shift for themselves too much. They are sometimes given too much help, sometimes too little, both being equally undesirable. There is often an insufficient amount of conference between student and professor. These evils are especially apt to exist when too much work is being undertaken, and when the number of students is too large for the teaching force and equipments. Under these circumstances students are sure to acquire slovenly habits of thought, and such laboratory work is worse than none.

Another difficulty sometimes encountered grows out of the impossibility of coördinating laboratory work with the elaborate systems of grading still in force in some places. Perhaps it is true that marks applied to laboratory work are a shade more meaningless than they are elsewhere, but the science teacher working under the informal conditions of the laboratory is to be envied by any other teacher for the opportunity he has of coming into close relations with the student, and finding out exactly how each mind is working.

There are many questions of method yet to be settled, it is true. The test of experience is necessary before any general mode of procedure can be said to be the one that will yield the largest returns. But these are relatively minor matters that may be left to those in whose fields of work they properly belong, without affecting the general validity of the proposition. The laboratories are with us to stay, and their methods are coming to be more and more used in other lines of teaching.

I have occupied more time, perhaps, than I should, and still I have only touched upon a point here and there that seemed to stand out a little more prominently than the rest. I trust that much will be added to what I have said by those in charge of scientific chairs in other institutions, and that enough may be brought out to convince any who may be skeptical on the subject, that there is only one way in which real science teaching can be done.

THE PUBLIC HIGH SCHOOL AS A PREPARATION FOR COLLEGE

MR. E. J. BATTY
Nashville High School

The backwardness of the South in political influence, in the arts and manufactures, is due partly to the devastation and social upheaval wrought by the War of Secession; partly, perhaps, to the nature of our soil and climate; partly to the presence of a large negro population, which is always obnoxious to rapid and permanent commercial advancement. But the cause with which we are more directly concerned is our comparative indifference to education, and its consequent low standard among us. It has long been recognized, in spite of some reactionary and fantastic criticism, founded on imperfect generalization from a few exceptional instances, that in this time and country higher education is a potent factor in individual success, that

still "the general counsels, and the plots, and the marshaling of affairs come best from those that are learned."

It is not so generally conceded, though it is not less true, that the success of a *people* now depends largely on the thoroughness of its educational system. This fact has been emphasized lately by Dr. Dabney, specially with reference to the lamentable state of our rural system of elementary instruction. But it is of even more importance that the eyes of influential southerners should be opened to it in connection with the need for more encouragement of, and exertion for, that part of education which finds a home in our universities; in connection with the need for making the university the natural finish to the high-school course, not for an infinitesimal minority, but for a fair proportion of our pupils. In opposition to this view we hear much of the necessity for broadening and strengthening the base rather than perfectly finishing the apex; for building a firm foundation rather than beautifying the upper stories. But the similes are not good ones. Education is no lifeless structure. It is not only the vitalizing force in politics, but itself is a living, growing organism, each part so interwoven with the others, that if one suffers, all feel it; and, if to be compared to anything, more like those endogenous trees, whose highest fruit is also their growing point, so that, if that is injured the whole plant is weakened; if it is destroyed, the tree dies.

We all know that the German is beating the Englishman in manufacturing and commercial fields, in spite of the latter's greater mental agility and physical adaptiveness. Most of us will agree that the secret of this phenomenally rapid advance is found in the greater thoroughness of the German educational system. But is not this completeness largely the result of the wide endowment of research, the rare devotion to learning, *qua* learning, of their universities, of their leading men; which influences have so spread through the masses, that, as Miss Martineau says, "learning has become the taste, the characteristic honour of the nation"? "*Mutato nomine de te Fabula narratur.*" Put North for Germany, South for England, and the case is nearly ours.

Not only is the importance of the university, as the proper completion of a public-school system not recognized, but even the high school is regarded by many as a superfluous luxury. At an educational meeting in Nashville—and whenever in this paper I speak of Nashville or of Vanderbilt University, I wish to say distinctly that I do so in the first place *honoris causa*, as regarding them as well in the

front rank of the towns and colleges of the South; secondly, I use them as illustrations, because I am familiar with them from residence and association of more than a decade—at a school commencement, I say, last year in Nashville a prominent citizen spoke somewhat to this effect:

The whole benefit to the state that education gives can be obtained in your grammar or elementary schools. These schools afford all the instruction necessary for the formation of good citizens. With this thought you can comfort yourselves, if our financial needs should make necessary the abolition of the high school.

That this is not merely the opinion of the individual who uttered it; that there is no great enthusiasm among the wealthier people for the high school is shown by these facts: no gift of any value has been made to it by any citizen in recent years; while the personnel of the faculty has been kept at a comparatively high standard, our high school library, both in equipment and accommodation, would be a disgrace to a respectable village; our high-school building is a byword and a jest.

If we go outside the public school the same state of apathy is to be found. The endowment and current income of the colleges of Nashville are almost entirely derived from alien sources.

Looking around for some northern town, whose secondary education might fairly be compared with ours, my attention was attracted to an article describing the new township high-school building at Joliet, Ill., recently erected at a cost of \$250,000. Further inquiry gave me the information that the township has a population of 45,000, and a total income of \$385,000. Its yearly expenditure for the conduct of all schools was \$95,000 (about 25 per cent. of revenue), and for that of the high school \$25,000 (about 26 per cent. of total school expenditure). The total revenue of Nashville is over \$1,000,000; expenditure for schools, \$166,000 (less than 17 per cent. of revenue); for high school, \$13,000 (less than 8 per cent. of expenditure for schools).

A necessary step, then—one would almost say a first step—in making our southern high schools a training ground for the university, is to bring southern opinion to recognize the value to the social order of secondary and higher education; to make the business men understand that permanent commercial prosperity is largely dependent on education; to convince the ordinary parent that, while a college course may be of no immediate advantage to his son, it increases his chance of eventually rising to a high position, even if he embrace a business

career. So that the public funds shall be more freely used to foster the high school, and private munificence shall assist in the raising of fitting buildings, the donation of libraries, and the founding of scholarships that shall enable the best pupils of the public school to grow to the full stature of educated citizenship.

And who should be the leaders of this crusade but the professors of our universities, who are not merely teachers of Latin and Greek, but hold their high position, their prestige and consequent influence, in trust, as it were, for the furtherance of education as a whole? The columns of our newspapers are open to them, the common people hear them gladly when they speak from the heights of their learning and experience, and even the politicians have some regard for them. They may be doing all they can to help the struggling high-school teacher, whose highest ambition for his pupils is that they may go to, and win success at, the university; but I have never known a university professor visit our school; when, some few years ago, our course was enriched by the addition of Greek, German, Spanish, and French, no word of public commendation came from any; when, last year, Greek, French, and Spanish, were dropped, and Latin lost the half year it had with so much difficulty gained, no word of protest was heard from any.

Frankly, I do not think they adequately use the undoubted power they have, in strengthening our school system just where it is weakest, and where its increased efficiency would directly benefit the universities. For I do not hesitate to say that no class of freshmen is superior to that furnished by our public schools, and I venture to read in illustration the marks made by one of our last year's graduates at the Vanderbilt final freshman examination this June: Mathematics, 96; Latin, 92; English, 98 (highest mark); German, 94; Greek, 91 (highest mark). A training school could hardly show a better individual record than that, and though such a record may be unusual, it is not exceptional.

Meantime, while our civic authorities are being educated up to the point of providing a special department in every high school for preparing pupils for the university, what can be done to improve the present conditions? Here, again, if much is to be accomplished, the colleges must take the initiative. The high-school teachers can do little or nothing, but loyally and earnestly work, as generally they are doing, in their several spheres to carry out the plans of the governing bodies. These latter are scarcely likely to make great efforts in this

direction, unless acted upon by some outside pressure, and however desirous some of them may be to help the few who use the high school as a stepping-stone to the university, of themselves they hardly know how to move. To the colleges, then, and to this association especially, I appeal.

First, I would urge the abolition of all admission by certificate. So long as this is permitted the high school must endeavor to be enrolled among those institutions which have this privilege. Otherwise they would acknowledge themselves inferior to other secondary schools, and this is by no means the case. On the other hand, the standard of graduation in public schools is, for obvious reasons, somewhat low, and a graduation diploma should not admit to college. As things are now, I have known pupils who barely made the 65 per cent. required, apply for certificates to admit them to Vanderbilt, a course that cannot but bring trouble on them, and cause the school to be evilly spoken of. Yet again, admission by certificate removes one great incentive to study, and the high school needs to retain the few ~~for~~ circumstances allow. If high-school teachers could go behind the diploma and testify to each candidate's fitness, this difficulty would disappear; but such a way out is hardly possible, for the teacher or for the college.

Secondly, the colleges, through this association, should hold uniform examinations every May for all secondary schools, such examinations to allow entrance to any college of the association, but not necessarily to every freshman class, this being a matter for internal regulation by the college. All colleges of this association should require their attached medical and law schools to accept no students who had not passed this examination. The injury done to secondary education on the one hand, and to the dignity and efficiency of the learned professions on the other, by taking boys from our eighth grade, and turning them into properly qualified physicians in three or four years, can hardly be overestimated, and the universities to which the schools belong must bear the blame of it.

While the question papers would have to be prepared by the university professors, the pupils' papers would be corrected by the principals of the secondary schools, who would send them for revision to that college to which each student should desire admission. In this way the work and expense to the colleges would probably be less than under the present method. In course of time this examination would take the place in the South held by the Regent's examination in the

state of New York, and would here, as that has there, help materially to raise the standard of the work done in our schools.

I append a suggested scheme for such examinations, which has been submitted to, and in the main approved by the faculty of the Nashville high school. It will be noticed that the scope is limited, and it is intended that the examination shall be more thorough on that account. Special attention is called to the necessity for frequent change of books read in foreign languages. Our public schools, where we have so little control over the pupils' preparation, require some such regulation for the production of the best work.

There are, finally, two subjects that require special notice. I am glad to see science appearing among entrance requirements, but we need to guard against calling by that honorable name the cramming of a number of facts connected with botany, geology, or any of the sciences, and giving credit for such mechanical acquisition. No school should present pupils for entrance examination in this subject which has not adequate laboratory appliances, and the examination should test proficiency in practical work, and should cover and give credit for one year's college work. This puts science on an equal footing with French and German.

Now two years' high-school work in any subject is generally considered equivalent to one college year. This clearly points to the desirability of having one science subject taught for two years rather than two for one year each. There are other advantages attending such an arrangement. It is a continual difficulty to get sufficient money to keep the laboratory supplied with apparatus and material. This poverty is much more felt when two subjects have to be provided for. The amount that might give a fairly good chemical or fairly good physical outfit, becomes miserably inadequate for both.

Nor would it be a bad thing for the ordinary pupil to have to study for two years in, say, chemistry, and so to get a real, if limited, knowledge of it, instead of splitting up the time between two or three sciences. The province of the high school is not, except incidentally, to impart general information, but to train the mental powers, and its greatest weakness is lack of concentration. "In the high school a crowd of conflicting attractions rush upon the mind, and the capacity of attention is dissipated. The multiplication of interests makes steady pressure of any sort very hard to get" (H. S. Nash, *Higher Criticism*, p. 36). To help to eliminate this weakness from one department would not be an injury, but a help, to the ordinary pupil.

Of the eleven prominent high schools whose reports I have been able to get, only one, Norfolk, Va., gives two years to any one science. Two of them, Atlanta, Ga., and Birmingham, Ala., give only one semester to each science. And it must be remembered that physics, which is really made up of several distinct branches of science, is considered in all schools as one science. If the school authorities could be brought to see that a change of this kind would give better general results for the same expenditure, and would also help very materially the candidates for the university, the desired readjustment would be effected.

Lastly we come to Greek. Of the eleven schools above referred to only four teach Greek, and the demand for it is so limited that it can scarcely be hoped that high schools generally will put it in their course. Public-school pupils who go to the university are usually not very well off, and largely do so to acquire standing that shall give them a position in the higher ranks of teaching, and need the bachelor of arts degree rather than the bachelor of science. On the other hand, five at least of our southern colleges require Greek for the bachelor of arts degree, and it is to be desired that all should.

The proposed amendment to by-law No. 3 reads: "For the present instruction may be furnished beginners in Greek . . . but such work shall not be counted toward a degree." If for "may" we could read "must," and could persuade all the colleges of this association to accept such change, it would be much better, in the present condition of things in the South, for the colleges, for the standard of attainments of bachelors of arts, and for the schools. It would in no way interfere with those schools which are able to do good preparatory work in Greek, for their pupils would still have only two years' work in Greek required for the bachelor of arts degree, as now. It would enable high-school pupils to take the bachelor of arts degree with Greek, without which I think it ought not to be taken. There are a number of small private schools, in whose curriculum Greek is a costly exotic, which, yet being demanded by a small minority, they cannot afford to do away with and, at the same time, cannot teach properly. Their release from the necessity of retaining it would enable them to increase their efficiency in other directions — English and history, *e. g.* — where some improvement is sadly needed. The present regulations practically compel colleges to take pupils badly prepared in Greek, and then to give them the bachelor's degree after two years' college instruction, of which usually only about forty recitations are conducted by the professor of the subject.

For all southern colleges to give instruction in elementary Greek would, I repeat, benefit the students, the schools, and the colleges; may I not add, would be a help to classical education in the South. It can scarcely be contended now, as it was at our meeting at Knoxville, that it is more difficult to find competent teachers of elementary French or German than of Greek. One would like to hear the opinion of teachers of freshman Greek on that point.

To sum up. Southern high schools can, by virtue of the resources at their command and their comparative independence, prepare for college far better than the average private school. That they should generally do so needs only an *entente cordiale* between boards of education and the college authorities. From the colleges, as the representatives of higher education, should come the first advances toward its establishment, and I believe that the specific steps urged in this paper—the institution of a general examination, the recommendation to the schools of at least two years' consecutive study of one branch of science, and the providing for elementary instruction in Greek—would greatly help to such a result.

ADDENDUM

SUGGESTED YEARLY EXAMINATION FOR SECONDARY SCHOOLS

TOTAL REQUIREMENTS EIGHT POINTS

Required (4).—Mathematics 2, English 2.

Elective (4).—Latin 2, Greek (*a*) 1, Greek (*b*) 2, German 1, French 1, history 1, science 1.

DETAILS

Mathematics.—Algebra, simple and quadratic equations, geometrical and arithmetical progression; plane geometry; solid geometry; or the elements of plane trigonometry.

English.—Grammar, rhetoric, and composition. The *Study* subjects selected by this association.

Latin.—Two selected subjects, one prose and one verse, to be changed every year and selected two years in advance. Questions in grammar, prosody, history, mythology, arising directly from the texts studied. Prose composition founded on texts studied. Unseen translations from authors not usually read in schools.

Greek (a).—As in Latin, omitting verse subject, prose composition, and unseens.

Greek (b).—As in Latin.

French and German.—One selected book; otherwise as in Latin.

History.—Outline of history of United States, and a special period of ancient or modern history, to be changed every year and announced two years in advance.

Science.—Equivalent of one year of college work in chemistry or physics.

EXPLANATIONS OF SUBJECTS

Mathematics.—Plane trigonometry is put in as an alternative to solid geometry as being (1) somewhat easier for the young pupil, (2) capable of more immediate practical application, and (3) more useful to the average undergraduate.

Latin.—Prose subjects for selection: Sallust, the *Catiline* and the *Jugurtha*; Livy, one book; Cicero, *De Senectute* or *De Amicitia* with one oration, or any two orations. Verse subjects for selection: Virgil, two books of *Æneid* or *Georgics*; Horace, two books of *Odes*; Ovid, two books of *Metamorphoses*.

Greek.—Prose: Xenophon, two books of the *Anabasis*, or one book of *Hellenics* or *Memorabilia*. Verse: Homer, two books of *Iliad* or *Odyssey*.

History.—The special period should be covered by some short accessible textbook.

THE EQUALIZATION OF THE REQUIREMENTS FOR ADMISSION INTO THE DIFFERENT COURSES LEAD- ING TO THE FIRST COLLEGIATE DEGREE

PROFESSOR F. W. MOORE
Vanderbilt University

The scheme of studies which includes three or four years of instruction in Latin and two or three in Greek, together with the amount of mathematics, English, and history, which can be conveniently taught in connection therewith, may be accepted as the standard curriculum for preparatory and high schools, measured from the cultural point of view. The average student who has advanced through this course year by year to the close has attained to a degree of maturity, and has acquired a stock of information and habits of thought and study such that he may reasonably be subjected to college tasks and methods and exposed to the freedom of college life. This association has, during the past few years, been giving special thought to devising a plan adapted to the limitations of southern schools, by which those students who do not study Greek, and perhaps omit Latin also, should be advanced by like stages through a parallel course of equal, or approximately equal, cultural value. All are agreed, it would seem, upon the wisdom and necessity of inaugurating such a curriculum in the preparatory schools, but if it is to be expected of the schools that they shall bring all their pupils up to the same degree of culture, whether by the classical or the non-classical route, then the colleges should adjust their requirements for admission so that they will be equal for all the various courses, and the same as the requirements for graduation from the preparatory schools. Any other course would tend to the disorganization of the very system of preparatory school work

which the colleges as well as the schools of this association have received with approval.

While it is very true that the requirements for the admission of candidates for a degree differ very considerably from institution to institution, that is not the point at issue here and now. Such differences can be entirely eliminated from this paper without affecting the present discussion, and the impulse to equalize them may be dismissed with no other ceremony than the expression of good wishes for its success. We are directly concerned with the different requirements for admission into the different courses leading to a degree in one and the same college. A study of the catalogues of southern institutions shows a situation which may be thus briefly summed up: In thirty-eight colleges offering ninety-two separate courses leading to a degree, and distinguished from each other by differences in the requirements for admission, thirty-eight include Latin and Greek; ten omit both without any substitute whatever; nineteen omit Greek (or one ancient language) without any substitute; twelve retaining the Latin require a substitution for the omitted Greek; and thirteen require a more or less adequate substitution of other subjects for both Latin and Greek. A comparison of the catalogues of several recent years yields evidence of a conscious movement towards the equalization of these different requirements in some of the most representative colleges. This is a tendency which richly deserves to be encouraged and promoted, and it is the purpose of this paper to review some of the reasons for it, in order, if possible, to stimulate a more general interest in it. The old policy of unequal requirements is a short-sighted one for the colleges to pursue; and one which is also deleterious to the schools; while the new policy will help both and is thoroughly consistent with, indeed is even a necessary complement to, the purposes and past efforts of this association.

The old policy is a short-sighted one for the colleges to pursue. When a man has entered college after satisfying low requirements for admission, and has taken a relatively light course because of the excessive number of beginner's classes in it (being, however, the only ones for which he is prepared) and finally graduates with the degree which is offered for such a course, he is thereby certified publicly and forever to be a man who has had less than the maximum advantages at college. In individual cases the stigma, for such it is, however slight, may be unwarranted. One man may make better use of inferior advantages than others will make of superior opportunities. But

there is justification for it on the face of the facts, and it is notorious that it generally attaches. The writer has had to contend against it in dealing with students whom, not from lack of previous training but from consideration of their tastes and aptitudes, it seemed wise to guide into a scientific course. Surely a college is short-sighted which causes that some of its alumni shall look down upon others and that these others shall have occasion for shame before their brothers and the public at large. The policy involved actually presents a motive to those who really have most need of the college training to abandon half-used the opportunities for an education which they have.

It is sometimes said by the colleges in justification of their course that it is followed from the noblest motives and the highest consideration of public welfare. There are ambitious and capable young men with such poor local educational advantages that their natures will be dwarfed and the public be deprived of their best services unless the college shall open its opportunities to them, poorly equipped as they are to enter. Such cases may at one time have been more frequent than they are now. There still may be individual cases which seem deserving of some concession. But it is not the past and the individual case; it is rather the future and the general policy which commands our consideration in this connection. Is it the function of the college to hold itself ready to supplement poor local school systems, wherever they may appear; or is it not rather its function to pursue such a policy as will foster good schools everywhere? But these two policies are mutually contradictory. One must be adopted and the other will be opposed. Now, if the argument in favor of the former is good for anything at all it would lead the colleges to offer beginner's Latin and especially beginner's Greek. But that point has already been fought and won. The premise on which this paper is based is the established fact that enforceable and actually enforced requirements for admission into the classical course are higher than those for entrance into the scientific course; and further, it is the determined policy of this association to exert every possible pressure upon the schools for their improvement. Now where there are already considerable and growing facilities for acquiring a preparatory-school training in the classical course, it cannot be from lack of schools, but merely from lack of broad equipment that the deficient preparatory training for the scientific course arises. This brings us back to the alternative stated a moment ago. Either the colleges must use their resources in doing the work of the schools, or bring such pressure to bear upon the

schools and the constituency which supports them that they will do it themselves. The college that pursues the one policy will surely win the lasting gratitude of some deserving individuals, and may make a specific contribution to the public service. But the other policy is feasible, is consistent with and an essential complement of the policy already adopted toward the preparatory classical course; and the college which follows it will leave the lower field to parties who are capable of exploiting it fully and will have its resources free for seeking equal honors in its own peculiar fields.

Financial necessity and the necessity of making an imposing exhibit before the state legislature or the denomination is the secret motive which impels many colleges to strive for numbers even at the sacrifice of scholarship. But here, too, a short-sighted policy is set over against a broad, far-sighted one. Shall the college get its students wherever it can, with little regard to their state of preparation or the ultimate consequences of its policy? or shall it by fostering the preparatory schools at once raise the grade of candidates for admission and increase their numbers? Whatever moral courage it may take to make the choice and bear the temporary sacrifice, it is plain what reason dictates. Surely, no one can show that good preparatory schools have had the tendency to decrease the number of students who go away to college. Indeed, the plain fact of observation is that the number of college students has been rapidly increasing in the region of our country where the best preparatory schools abound; and it would take a great deal of temerity to argue that the increase had taken place in spite of the influence of the schools; for the very atmosphere of the preparatory school, manned as it is by teachers who are themselves college graduates, is calculated to develop ambitions in this direction. Whatever some people in the South may have to say against the policy of free public high schools with first-class equipment, it is not for the college man to object to them. It is for his interest to encourage them.

But if the policy is short-sighted from the standpoint of the college, it is deleterious to the interests of the school; and the schoolmen have reason to be active in opposing it. This point needs no elaboration. It would require merely a restatement from the schoolman's point of view of many of the arguments just made; and more than likely that has already been done by most of us mentally in passing. If the college enters any portion of the field which belongs to the preparatory school, in just so far it diminishes the strength of public sen-

timent which is interested in the school and robs it of its sustaining patronage and financial support.

But it is especially and peculiarly in the difficult problem of properly grading the preparatory-school work that the lower requirements for admission into certain college courses affect the schools harmfully. If some pupils are pursuing Latin and Greek and the other subjects commonly associated with them, while other pupils omit one or both of these studies, it is very important that the latter class of pupils should have some substitute for the omitted work. If they do not, they will waste their time and, what is worse, learn habits of idleness, a result which no honest teacher can contemplate. One method of supplying the deficiency may be found in advancing the pupils more rapidly in the fewer subjects which they are studying. This will necessitate the organization of new classes and an increase in equipment and teaching force, and, besides, it will result in shortening and narrowing the course and in making the pupils ready for the subjects concerned at a relatively immature age. However much the pupil may welcome this, and however much the college may invite it by low terms of admission, it is not the course which the schoolmaster, apart from any material or personal considerations, will plan for the best welfare of his pupils. Another method is to add new subjects or pursue the old ones further until an equivalent is provided for the omitted subjects. It will require no increase of teaching force and equipment over the previous plan. It is the plan which appeals to the schoolmen as the one eminently wise; and it is the one which has met the approval of this association as it was presented in the report of the Committee on Program of Studies for Preparatory Schools two years ago. Such influence as the individual college possesses—and on the schools which are its feeders its influence is a vital force—will be exerted against the best interests of the school and its pupils if it maintains a low standard of admission to any of its courses, while its influence will be uplifting if it adjusts its requirements for admission to the work which a preparatory school can do with a model curriculum.

If there has been any truth in what has been said and any virtue in the manner of its presentation, the propriety, the timeliness, and the importance of discussing the question in the presence of this association must be apparent. The purpose of this association to unify and develop the system of higher education in the South is a great and noble one. Encouraging progress has been made in several directions.

Of late the association has been much occupied with the question of equalizing the amount of work required for the various college degrees, on the one hand, and, on the other, with the problem of broadening the preparatory-school curriculum. But the desired results in both of these directions will be jeopardized if the requirements for admission into the different courses of the same college are unequal. It is hoped that the question presented briefly in this paper will meet with the consideration which its intrinsic and strategical importance merits.

NOTE.—In the colleges named below the maximum requirements for admission to any course leading to a degree are those in the course including both Greek and Latin :

Alabama, University of	North Carolina, Trinity
Arkansas, Hendrix College	Wake Forest
Georgia, Emory	South Carolina College
University of	Wofford
Mercer	Tennessee, Cumberland
Kentucky, Central	Grant University
Centre	University of the South
University	Southwestern Baptist
Wesleyan	Southwestern Presbyterian
Louisiana, Centenary	University of
Tulane	Vanderbilt
Mississippi, Millsaps	Texas, Baylor
University of	University of
Missouri, Central	Southwestern University
Drury	Virginia, Emory and Henry
University of	Hampden-Sidney
Washington	Randolph-Macon
William Jewel	Randolph-Macon, Woman's College
North Carolina, University of	West Virginia, University of =38

Of these colleges the following offer a course leading to a bachelor's degree in arts, science, or letters, which may be entered upon without preparation in Greek or Latin, or any substitute for them :

Alabama, University of	South Carolina College
Georgia, Emory	Tennessee, Cumberland
Kentucky, Central	Southwestern Baptist
Mississippi, Millsaps	Southwestern Presbyterian
University of	Texas, University of (now changed) =10

Of these same colleges the following offer another course leading to a degree, which requires preparation in Latin, but which may be entered upon without Greek or any substitute for it :

Alabama, University of	Missouri, William Jewel	
Arkansas, Hendrix College	North Carolina, Wake Forest	
Georgia, Emory	Tennessee, University of the South	
University of	Southwestern Presbyterian	
Mercer	University of	
Kentucky, Central	Texas, University of (changed)	
Centre	Virginia, Hampden-Sidney	
Missouri, Central	Randolph-Macon	
Drury	South Carolina College	=19
Washington		

The following offer a course leading to a degree which may be entered upon without Greek, but with an adequate substitute :

Kentucky, University (one year each of German and French).

Wesleyan (one year of German for one year of Greek).

Louisiana, Centenary (at least one year each in German and French, for two years in Greek).

Tulane (United States history and ancient history for two years of Greek).

Missouri, University of (one year in history and one in science for one and one half in Greek).

North Carolina, University of (for one ancient language, two years of one modern language or one of physics).

Trinity (one year in one modern language for one and one half year in Greek).

South Carolina, Wofford (one year of German for one year of Greek).

Tennessee, Grant University (two years of German for two years of Greek).

Vanderbilt (two years of one modern language for two to two and one half of Greek. Beginning with 1903 two years in physical geography or . . . will be added).

Texas, Baylor (solid geometry and one year of modern language for two years of Greek).

Virginia, Randolph-Macon Woman's College (the equivalent of one college year in French or German for Greek). =12.

The following offer a course leading to a degree which may be entered upon without preparation in Greek and Latin, but with a more or less adequate substitute for them :

Arkansas, Hendrix (physiology).

Georgia, University of (one year of German for two years in Greek and Latin).

Kentucky University (100 pages each of easy French and German).

Louisiana, Tulane (two years of one modern language and United States history and ancient history for four years of Latin and two years of Greek).

Mississippi, Millsaps (political and physical geography and American history).

Missouri, University of (one year of history, two years of a modern language, and two of science for three of Latin and about two of Greek).

North Carolina, University of (two years of one modern language and one of physics for three and one half of Latin and one and one half of Greek).

Tennessee, University of (advanced algebra or solid geometry and some subject amounting to one year's work in United States history, physics, botany, modern language, etc., in place of Latin and Greek).

Vanderbilt (two years in one modern language and physical geography and one from the following : elementary Latin, a second modern language, or science, or history, to go into effect in 1903-4).

Texas, University of (beginning with September next, a given number of points will be required ; but in the valuation of subjects Latin has perhaps been undervalued).

Southwestern University (two modern languages for two years of Latin and one of Greek).

Virginia, Emory and Henry (one year each of French and German for two years of Latin and one of Greek).

West Virginia, University of (out of 77 courses arranged in groups 39 are required). = 13.

SUBSTITUTES FOR LATIN AND GREEK IN ADMISSION REQUIREMENTS

MR. W. D. MOONEY

Principal Mooney School

When we are told that a young collegian has made a broad jump of twenty-two feet, we know that the conditions under which he made the jump are practically the same, whether he is from the North, the South, the East, the West, or some intermediate point of the compass. But, when we are told that the same young fellow has taken his bachelor of arts, bachelor of science, or his doctor of philosophy degree from some institution, then we cannot generalize as to what he has learned, or has had a chance to learn. The degree may be a help or a hindrance ; it may indicate scholarship, or it may not ; it may be a badge of honor, or a mark of infamy. We can tell nothing at all about it, until we look into the particular case, and see what it represents.

All this, simply because a degree at one place is not the same thing as a degree at another. We would clearly enunciate the proposition that the same degree should represent the same amount of preparation for college and the same amount of work in college ; that it should indicate a like amount of culture, study, and thought. In other words, when you hear it stated that a man has a bachelor of arts or a bachelor of science degree, you ought to know just what he has had a chance to learn, at least in a broad sense ; that the required work for this degree should be the same in a Tennessee college as in a Massachusetts college. We hear so much said about "varying conditions and environments," and a weak degree justified on the plea that "our surroundings require us to do this." I have no patience with the argument ; it is not a necessity that a school dub a man bachelor of arts or bachelor of science, and it should not do so, unless it can give him a worthy one.

I should be glad indeed to have this association say that, if an institution cannot give a degree based upon certain conditions, it will not place that institution upon a par with schools that give a degree representing more culture, more thought, and more length and breadth and depth of scholarship. Just say frankly that, if a college cannot give as good a degree as this association thinks it ought to give, it will not be recognized by the association. Enter in your own class.

I have wondered many times at the conception some of our southern colleges seem to have of the whole degree business. In many places the giving of degrees amounts almost to a fad. Almost every one-horse-power college thinks itself prepared to give a bachelor of arts degree, and if a bachelor of arts degree, still more a bachelor of science degree. The whole subject seems shrouded in mystery. Only last July, here on the mountain, a graduate of an institution which has graduated more pupils than any other in the United States, in discussing the doctor of philosophy degree, gravely argued that a small college could give as good a doctor of philosophy degree as any university in the land; that no college had so meager an equipment that it could not afford to buy Plato, Aristotle, and all of the great philosophers, and that with these books a pupil could be given as good a doctor of philosophy degree as possible. The wise reasoner has attached to the name A.B., A.M., LL.D., M.D., Ph.D. But we are not dealing with colleges of that type, but with those that really have it in their power to do good work and to direct educational thought.

The vagueness of thought with regard to the bachelor of science degree is well illustrated by an incident that occurred a few years ago. It took place in a church school in the state of Missouri, a collegiate institute, whatever that may be. The president was a bachelor of philosophy from a small college. He stamped his initials on his stationary in three capital letters, punctuating them as if each of the three were an abbreviation. Just before commencement this distinguished gentleman called one of his teachers to his office and asked whether he thought a certain boy who had studied bookkeeping for one year, had had a year in physics, one in German, and one in geometry should have a bachelor of arts or a bachelor of science degree. The teacher insisted that he should not have anything awarded him, but the president conferred a bachelor of science degree upon him. This is not much worse than the view held by many of our southern colleges today. The bachelor of science degree seems to be considered as something intended to reward the efforts of the poorer students, or of those who

do not care for a bachelor of arts degree. Where the meagerness of material equipment and the consequent lack of teaching force renders it impossible for the college to give one well-defined bachelor's degree, it certainly ought not to attempt to give two.

Coming down more specifically to the bachelor of science degree, let us see what preparation is required before the matriculate can enter upon the work leading to a reputable bachelor of science degree, and then let us see what he has to do before he can win the degree. Then let us contrast that course with what we find usually given in the South. Take the bachelor of science of the University of Chicago.

First, for admission: credits are reckoned in units, fifteen units being necessary. The recommended grouping is as follows:

Cæsar and elementary prose	- - - - -	2 units
Virgil, Cicero and advanced prose	- - - - -	2 units
Greek and Roman history	- - - - -	1 unit
Algebra to quadratics, algebra through quadratics, plane geometry, solid geometry	- - - - -	3 units
English	- - - - -	2 units
French and German, or French or German	- - - - -	3 units
Physics	- - - - -	1 unit
Other science	- - - - -	1 unit

As I said, this is the grouping recommended, but as the student is likely to follow the line of least resistance, when he has a chance to do so, there is also a required grouping, which prevents him from being too much able to take "snaps." This is the required grouping: history, physics, and one other science, 1 unit each; mathematics, $2\frac{1}{2}$ units; and English and Latin, 2 units each, making a total of $9\frac{1}{2}$ units, the other $5\frac{1}{2}$ units being taken from certain lists prescribed. They are called elective, but the election is so much restricted as to show the poor fellow right at the start that election doesn't really elect after all.

Now that he has entered upon the bachelor of science course, let's see what he has to do to carry it: The work of the first two years is in what is called the junior colleges. The amount of work required in any junior college is eighteen majors, besides elocution and physical culture. The major is the unit of work, and consists of twelve weeks' work, five days a week. The junior college of science (leading to degree of bachelor of science):

French or German	- - -	3 majors	Public speaking, two hours a week
English	- - -	3 majors	during two quarters.
Mathematics	- - -	3 majors	Physical Culture, four half-hours a
Science	- - -	6 majors	week.
Elective	- - -	3 majors	

The Work of the Senior Colleges.—The last two years leading to the degree of bachelor of science are spent in the senior colleges. The amount of work required in any senior college is eighteen majors. This work is elective, within certain limits, limits so narrow as once more to satisfy the student that election does not elect. The man who gets a bachelor of science degree in this way leaves college with a profound respect for the degree.

I have carefully examined the catalogue of every southern college of any prominence, and find that we have no requirements for entrance and none for work in course that compare at all favorably with those given. I find, too, that many schools in the East have requirements as strong. Many of our schools have no language save English required for entrance upon the bachelor of science course, and few require more than one language in course. In two or three cases those with the weakest requirements for entrance, and poorest course of study, give a doctor of philosophy degree.

Two of the best bachelor of science courses are those of Vanderbilt and Trinity. Vanderbilt at present requires preparation in algebra through quadratics, plane and solid geometry, English, United States history, geography, and a modern language. It proposes to add in 1903 one science, and either elementary Latin, a second science, a second modern language, or a second history.

Trinity has no bachelor of science degree, but has a bachelor of arts degree, with a scientific bias. It requires for entrance, American and general history, algebra through quadratics, four books of Cæsar, four of Cicero's *Orations*, six books of Virgil, and four books of the *Anabasis*, or one year of French or German. The course is one of four years, the required studies being mathematics, Latin, English, Greek, German, or French, history, physics, biology, and chemistry. It seems to me that Trinity has a magnificent opportunity for doing undergraduate work of high grade, with her liberal endowment of three-quarters of a million dollars, her faculty of twenty men, and with fewer than two hundred students. May she have the wisdom to confine herself to this work.

These are two of the most comprehensive courses offered, but they are sadly inferior to those of the East. I am sure than one cause of this is our squandering of our energy upon graduate work, when we should be trying to give our men decent undergraduate courses.

The remedy is a simple one. Let us insist on more exacting requirements for entrance, making the bachelor of science course a

distinctive one. Let us abandon the idea that it is a solace given to poor students, and make it really stand for something.

PREPARATORY TRAINING FOR GIRLS, FROM THE COLLEGE STANDPOINT

PROFESSOR J. L. ARMSTRONG
Randolph Macon Woman's College

The subject announced in the program is a large one. There is enough in it to furnish many themes for careful treatment, and I should, perhaps, have chosen but one of these that it might receive due consideration. But, on reflection, it seems to me best to give the whole subject a general review, even if hasty, since it has not received separate attention from this body.

The same underlying principles govern the preparatory training for both sexes. But, while mind is sexless, there are physical and social distinctions that superficially differentiate the one from the other. Circumstances tend to increase the distinctions and to widen the difference in the methods of training for boys and girls. In discussing this subject, however, while much may seem to be of general application, it is necessary to go back to fundamental principles in order to determine what this training should be.

There is no lack of schools for girls. They abound from the Potomac to the Rio Grande. To say nothing of the high schools, now rapidly increasing in number, cheap provision, or an empty boom hotel, or a man who has failed at everything else, straightway suggests an academy or more probably a college. Or perhaps—and more legitimately—some local demand, some denominational need, establishes a preparatory school.

But schools do not necessarily constitute facilities, and the wide lack of these facilities in the South is the insistent feature in the preparatory training for girls. I would not be taken as saying that there are no good preparatory institutions for our girls: excellent seminaries and fine high schools do exist; but they are few and widely scattered, wholly insufficient for the needs.

In order to appreciate this lack, let us call to mind what these facilities should be and contrast them with what they too frequently are. From our standpoint, education is intended to fit one for life, not primarily for a profession, and includes in its scheme the primary school, the preparatory, and the college. I do not include the kinder-

garten because, in my opinion, God's kindergarten—the mother and home—is far better than any that man has ever devised. It is in the grade next to itself that the college is closely interested, in the facilities that the preparatory school should have to make it perfect in its place.

The first requisite of a good school is competent teachers and enough of them. In these days of normal schools, the idea—I cannot say how—has become prevalent that teachers can be made, in spite of the fact that the good teacher is no more made than the poet. Too often in the lower institutions teaching is made a pot-boiler till the incumbent can get ready for some other position. These schools should have a sufficient number of the best men and women, well equipped, well trained. There is too much breeding-in, and breeding-in lowers the average. The graduate who, without further preparation, without the opportunity to widen his horizon, is straightway promoted to a place among his instructors, cannot raise his pupils to the level to which he has attained. Our preparatory teachers should aim at nothing less than the university doctorate.

Yet, granted that our teacher is well equipped, still it is often impossible for him to accomplish satisfactory results. With too many classes for the teacher, and too many in a class, the institution cannot be said to afford proper facilities. I have known cases—and they are far too frequent in schools for girls—where a competent teacher had been secured but was expected to do the work of two to save the extra salary. In fact, in the well-known female college it is the rule to pile up recitations upon the unfortunates without the grace of an increased pittance. The trouble is, there are plenty more aching to ache in their places and prone to continue this vanity of vanities. Very little, indeed, can be accomplished for the individual when the teacher has from eight to twelve classes a day, five mortal days in the week, and from thirty to sixty in a class. The prime requisite, then, is competent teachers and enough of them.

The facility next in importance is a sensible curriculum. It should be remembered that the secondary school now occupies the ground held a few decades ago by the college. At that time, however the curriculum was restricted and exclusive; but, little by little, the walls were battered down, till now the course is open to the admission of any fad. This is especially true of high schools. Dr. G. Stanley Hall taunts them with being a mere link between the primary school and the college; but my observation in this part of the country leads me to

think that more often they are linked on to some whim or interest or crude notion of a school board. The course is frequently overloaded, sometimes grotesque. "This is a good thing for the children to study; it is eminently practical. Go to, then, let us put it in."

The layman's idea of what is fitting for a course is determined by his touch-stone, "eminently practical." By it he means a mill that will grind out little prodigies ready to earn dollars. Such a mill is a business college or a course in stenography and type-writing. The product of the mill is ready to take a place at forty or sixty dollars a month, and twenty years hence may be found at the desk casting up figures or hammering a type-writer at—forty or sixty dollars a month. That is all there is to it. Manual training is another eminently practical subject. There is a great call for cooks and dressmakers and milliners and so forth; get the girls ready to take care of themselves. Thus things good in their place may be used to their abuse.

There is another fad. For some occult reason, French and botany and music and art are supposed to be peculiarly good for girls, while Greek and mathematics are tabooed. It is, then, passing strange that the most illustrious names in botany, music, and art are those of men, while Lady Jane Grey, Mrs. Mary Somerville, and many other women have made brilliant records in the ancient languages and the sciences. It is a fad; and it is a microbe that especially infests seminaries, institutes, and female colleges. It is not, however, worth while to attempt an enumeration of all the fads. These suffice for illustration.

So the curriculum, from these or other causes, becomes a heterogeneous mass of odds and ends, and the great purpose of education is missed. Very largely, too—though not quite so much as formerly—the course is a cast-iron one, and the unfortunates must adjust themselves to it. Such a curriculum is a

Tyrant more cruel than Procrustes old,
Who to his iron bed by torture fits
Their nobler parts, the souls of suffering wits.

Moreover, in the effort to acquire so much, nothing is gotten thoroughly, nothing is digested. An Englishman, well qualified for his task, says in criticising one of the best schools in the North:

Again, there was less accuracy: America does not produce many accurate and refined scholars; although, on the other hand, the work was more interesting than the work at an English public school, and had far more energy and bustle about it. Its weakness seemed to me to lie in this, that it developed the national faults instead of counteracting them. The American

national faults include not only want of self-control, but also inaccuracy and hurry. These three are all to be seen in the work.

What, then, must the hurry and inaccuracy be in the poorer schools!

After the curriculum comes equipment. Some idea of buildings better adapted to school operations has entered here and there, and once in a while questions of light and sanitation have received attention; still it is no unusual thing for girls to come up to college with eyes and health impaired, no one knows how. Nor is this all. Libraries and laboratories are conspicuous either by their absence or by their inefficiency. In modern teaching a working library is an urgent necessity. It is not just a place where books are issued; it is also a work-room with the tools at hand. It is not a fancy room designed to catch the eye of the visitor; it is a quiet room, well-supplied with chairs and tables and shelves and handy books. So with the laboratories. Text-book science, without the experiments, is largely chaffy stuff. Elements of the sciences have their place in the secondary school, and there should be the equipment to teach them properly.

This equipment costs, and our southern people do not realize how much it costs, both initially and in the maintenance. The general impression is that a school is a money-making concern; hence those who could and might lend aid do not give it. In the educational field, the university and the college are not the only objects for practical philanthropy.

These are serious needs in the preparatory training of girls; but the decent self-respect and laudable ambition of legitimate secondary schools would have enabled them to make better progress, had they not been impeded by sundry clogs. The removal of these impediments is, perhaps, the most pressing need.

Some years ago I lived in a region afflicted with Cheap-John colleges. In all that country there was only one good preparatory school, but that was a first-class academy. In a conversation about various institutions, with a seventeen-year-old girl, it happened that my curiosity was aroused by her indiscriminate use of the terms "college" and "academy," and I questioned her as to their relative rank. After a moment's reflection, she answered, "Why, of course, the academy is higher." This was, doubtless, philosophy *taught* by example.

Such institutions set up false standards and ideals, and at the same time, weedlike, tend to choke out good schools. There is Frogtown University; it parallels the academy course, does not make it half so hard, and confers a degree at the end; so cheap, too. It sounds so much bigger to talk about going to a university that the girl who is going to anything less than a college is made to feel very small. In olden times legislatures dealt out charters very jealously; not everybody could get one. Now they are to be had for the asking. In most cases they are commercial ventures, yet the law-makers do not interpose the safeguards that protect the public in the matter of charters for other commercial ventures. These things ought not so to be. Proper legislation should be secured to protect people and school against the wild-cat college just as much as against the wild-cat insurance company.

Clear out of the way, not only these, but also any other school founded, conducted, exploited to make money. I have my suspicions of the principal and owner of a school who buys corner lots and bank stock. Somebody is being defrauded. Many parents are unable to judge between schools, and few of those who know the difference have the opportunity to decide. It is easy enough to print catalogues and testimonials and picture-books. If you do not know how to advertise, there are capable agencies anxious to do it for you. For a consideration you can get before the public in such fine style that your oldest acquaintance would hardly recognize you. No wonder parents feel it is hit or miss in sending a child off to get an education; no wonder they feel a burden of anxiety. Squandered years can never be recalled, and misdirected faculties never wholly recover.

But there is interference from a source whence it ought not to be expected. And here I am treading difficult ground. Yet, if there is to be good preparatory training for girls, there must be good preparatory schools, and in behalf of these it is necessary to speak out.

The first interference of this kind is from the college preparatory department. I had almost said it is an unmitigated evil. It is true, however, that there was a time when a wide gap existed between school and college, a gap so rarely filled that a college for its life must bridge it over. But this bridge was frequently carried far back of the gap, with the excuse that preparation was so poorly done; and the college clings to it, verily as a drowning man to a straw. Some reach back to the very cradle with their kindergartens. This linking of a chartered college to primary teaching is hurtful to sound education. It is a

grievous error. College methods and college discipline are unsuited to the lower classes, and these suffer untold loss from the misfit, if not from neglect also, where the college spirit reigns. On the other hand, where the preparatory department is the more important, from numbers and other causes, the college work not only reacts to the detriment of the lower classes, but also is a sham.

Even where there is only a subfreshman class, the condition is hurtful. Girls are drawn away from the secondary school before they are ready for the transfer. They are not ripe for the change. It is hurtful to the school; it is hurtful to the college; it is hurtful to the girl. The school, to live, must not be forced to recruit half its complement every year. The college, to accomplish its legitimate work, must not be handicapped by a drag upon its vital strength. The student, to get a sound education, must have the methods, appliances, discipline adapted to her needs. If the preparatory work is to be done satisfactorily, if the gap is to be properly bridged, the ground must be left wholly to the preparatory schools.

Perhaps we are slowly removing these various causes of friction and loss; if so, however, not fast enough, for a new difficulty confronts our secondary schools, one that will strain their patience and their powers to the utmost.

Already in the North, where entrance requirements have been in force much longer, the outcry is heard. Joint meetings of representatives from school and college have met; but, so far as I have heard, nothing more than tinkering has resulted. It is charged that the college considers alone what it wishes, and expresses its wishes as commands. No less a person than Dr. Hall voices the cry when he says:

College requirements, and suggestions how they may be best met, have ceased to be educational themes in any large sense. It is high time to reverse this relation. The college depends on the high school, and not *vice versa*. The latter should declare its independence, and proceed to solve its own problems in its own way; it should strive to fit for life those whose education stops here, and should bring the college to meet its own demands.

Neither position, in my opinion, is correct. If the college is not a fifth wheel—and before this association there is no need to argue this point—if it is not a fifth wheel, it is a part of the educational system; and no part can be independent of any other part. The college cannot be independent of the secondary school; nor can the secondary school be independent of the college. That some of its pupils, that a majority of them, will not pass on to the upper institution does not

alter the case. For the girl that goes on to college, and for the girl that does not, the ideal training is the same.

What is the object of each institution? Is it not education? What is the object of education? We are told it is to fit the recipient for life. But the term, "to fit for life," has been so loosely, so variously used, that it may be well to state what I mean by it here. It is to train all the faculties of man and give him perfect control over them; the end in view is a well-rounded, perfect man, ready to discharge the various duties that may devolve upon him; to add his moiety to the uplift of the world.

With a common object, surely there is then common ground. Only the conditions are different. The preparatory school deals with the nascent mind; the college with the mind when it is becoming fixed. When the period of the first is past the work of the school is done. So far as its sphere is concerned it has prepared its pupil for life—whether it be the shop or the store or the home or the college. When the college takes up the work it is still preparing for life; it is training powers of mind in a further stage; it is preparing to meet greater emergencies with a greater self-control. While there is a change in institutions the sequence should be uninterrupted in the pupil.

But, even on common ground, connection may be missed. We are taking for granted that each institution employs the proper means, a well-devised curriculum, to secure the end of education. Still, as in each case no particular curriculum is the only means one or the other may adopt, the proper sequence may be interrupted. Hence, correlation is a necessity. The college has no right to force its way upon the school; nor can the school be justified in shaping its means without consulting the further interests of those committed to its care. There is no sense in compelling a pupil to lose a year or more of precious time in getting adjusted to the college course. Colleges and schools are equally to blame when this is the rule.

The entrance requirements constitute the common problem, and it is a problem that the two must work out together. In no other way can it be satisfactorily solved. Our present requirements must be considered a tentative scheme. They are not sacred; they should be torn to tatters if they work harm on either side, to be replaced by something better. The secondary teacher must state what he needs; the college professor what he needs; and something ought to be found to fit two needs having a common purpose. To illustrate a

detail, let me read you an extract from a letter I lately received. The question concerns an English entrance requirement :

I have read, carefully read, the "Speech on Conciliation with America," with directions as to the best methods of teaching it, and I do not know that I think it exactly suited to either the needs or the capacities of my girls, either in fourth English or fifth. My reason may be found in a sentence taken from the introduction to Crane's edition: "It is evident, therefore, that a student should undertake the study of this speech only when he has developed power of reading and writing, speaking and appreciating, narrative, descriptive, and expository argument." I would put this in the fifth English course if I thought fourth English could manage Macaulay; but I doubt it. Last year fifth English did good work with the "Essay on Milton," and I dislike to take from it something it can do to give it, perhaps, something it can't.

The great danger to our Southern colleges does not come from the large and powerful institutions above them. There are forces sustaining them against such pressure. The real danger lies in their ignorance of vital needs in the preparatory school and in cavalier treatment of it. We should study its needs, get its point of view, get in sympathy with it, and confer with its teachers. It is not sufficient to meet them here annually for a day or two and discuss general questions in a general way.

Such difficulties, as well as other hindrances, should, by conjoint effort, be cleared out of the way as soon as possible. While, however, the clogs we have been talking about are common to schools for both sexes—only more pronounced in those for girls—there are some that are peculiar to the latter, and that must be dealt with by the schools themselves.

The most injurious of these is the attention paid to the so-called music and art courses. I am no enemy to music and art. Indeed, I believe that instruction in both should be offered in our boys' schools too, to help in the development of the esthetic side. What I deprecate is the misuse and the degradation of these branches. It is true that the parents and the girls themselves are in part to blame for the abuse of these two good things. There is an idea abroad—one might say universal—in the South that a girl's education is not finished if she has not been taught "to play on the piano," and this without reference to her aptitudes. The amount of excruciating noise, called music, that can be heard over this land, shows that something is radically wrong somewhere. The dismal drawings and doleful daubs often proudly displayed by fond parents prove that the artistic

sense of our people is not being cultivated. But it pays to have music and art in the curriculum. And this is a strong temptation to the school struggling for existence; this is the stronger force impelling to their abuse. It pays to teach them in the way in which they are taught. The girls are drummed in; each must have music or art or—better still—both. Other work must content itself with the remnant of time and strength. Callow fledgelings go on up to college and announce that they wish to make a specialty of music. They do not know enough to know that they cannot comprehend and interpret the music of a great composer without an enlarged and well-stored mind.

Then there are the social instincts, stronger in girls than in boys, which must be taken into account. They manifest themselves in many ways very distracting to the authorities. Mere repressive discipline does not accomplish the end; and, besides, dependence upon this means brings waste of energy. They are forces that can be directed, and when turned into proper channels they are found to be beneficent.

But to go further would lead into details, and this is neither the time nor the place for minutiae. Then, let me sum up the whole matter. Secure for the development of the preparatory training of our girls the greatest freedom possible. Teach it to adapt the means to the end: to study the budding powers of the young mind, and to help them unfold symmetrically; not to choose Latin or Greek or French or mathematics or music because it is Latin or Greek or French or mathematics or music, but because one or another or all of these will contribute something to fit the girl for life.

Nothing is too good for our girls; nothing that we can give them is good enough for them. In their hands lie the destinies of the future. If the South is to regain her high place in the councils of this our mighty nation, it must be first through her women before it can be through her men.

THE PROBLEMS OF THE SMALL COLLEGE IN THE
SOUTHERN STATESPROFESSOR E. H. BABBITT,
University of the South

Apparently everyone who has read or spoken so far at our meeting has been doing "laboratory work" on college catalogues.

This paper is based on a careful study of all the southern catalogues I could get—forty-four in all—representing probably two-thirds of the colleges for white students, and more than that proportion of the students, in the states which formed the Confederacy, except Virginia.¹ The catalogues most in circulation represent of course the strongest and most enterprising institutions, so that averages and conclusions must be taken as making probably a better showing than a complete list would furnish. The catalogues were supplemented by the figures of the commissioner of education. It is to be noted that these are made up from the statements of the heads of the institutions, who are interested to make here as well as in the catalogues as good a showing as possible, and therefore the actual state of things is certainly not better than the figures show. Northern readers need to be informed, and southern ones to be reminded, that the commissioner's totals and averages include the figures from negro institutions, that must be revised in order to show the facts concerning the higher education of the white race, with which alone this association is concerned.

The facts sought are those concerning the college proper—the kind of institution which gives the higher liberal or humanistic education, as represented by the old bachelor of arts degree, with whatever modern variations, such as bachelor of philosophy or bachelor of literature, still mean general culture, and not, as quite often bachelor of science does, special preparation for a scientific profession. The latter is to be reckoned as professional study, as properly as that in a law or medical school.

The usual college course is four years. Supposing that the work is strictly prescribed for all students of the same class, that there is no division into sections, that each student has fifteen hours a week in the class room, and each instructor the same; then four professors can

¹ Virginia was omitted at first for an extraneous reason (not being represented on the board of the University of the South, in the interest of which the work was begun), and not added afterwards because the conditions there differ somewhat from those in the other states.

do the work. Supposing there are one hundred students, each of whom pays a tuition fee of \$50. I find from questioning a considerable number of college presidents and others, that of the total income of a southern institution, the average proportion which is available for salaries is about two-thirds. If the college has no other source of income, the salaries of the four professors will be \$833.33.

Let no one laugh at the poverty of this picture. Nothing better than this is shown by a surprising number of southern catalogues. A state of things represented by doubling these figures—eight professors, 200 students, and 120 hours a week of instruction, is well above the average of our forty-four colleges.

The latter basis, be it said, is a quite respectable ideal for a small college. Such a college, with proper material conditions, can do very effective work, and handle additional students to the number of a hundred or more without any radical readjustment.¹

Such a basis allows considerable work in sections in the lower courses, and election in the upper. A relatively small endowment, if nothing but legitimate college work is attempted, will add enough to the tuition fees to pay living salaries. With modest but adequate buildings, library, and laboratories,² free from debt, a productive endowment of \$200,000, and a \$60 tuition fee, really collected from 200 students, a college can claim to be on a sound financial basis. Without some such conditions in the way of endowment, faculty, and students, the work of a college is more or less hampered.

It may seem incredible, but it does not appear from the statistics that a single southern college is up to this modest standard. A few have between two and three hundred thousand dollars endowment,³ but very few others have half that, and very many have none at all to speak of.

In reckoning the number of officers of instruction, it is often difficult to get the real facts, because the college professors so often give instruction in other departments; oftenest in the preparatory, but also

¹The average number in the twelve smaller New England colleges for a recent year was 286.

²It has been brought out in the discussions at this meeting that no extensive laboratories are essential to the proper teaching of science where no research work, and no preparation for scientific callings, is attempted; it is merely necessary that the student shall have opportunity to see and handle and weigh and measure for himself, and this can be done with a very inexpensive equipment.

³For the use of the college department; some of the universities have more for all departments together.

in the professional. In very few of the colleges are there other instructors than the professors. Taking, however, the number of those professors who appear from the catalogues to be doing college work, the average for the forty-four institutions is eight; there are nineteen which have less than that number, and very few have more than ten. It appears, however, that the amount of instruction given is much less than the full time of eight men. The number of hours weekly is generally from 90 to 120. About 50 per cent. of the colleges are within these limits; 20 per cent. have more than 120 hours, and 30 per cent. less than 90. The average appears to be about 110. But the number of hours for each professor averages nearer twenty than fifteen; so that it is likely that the average amount of instruction given in a southern college is not more than the full work of six men.

The figure given for the possible salaries is also no fit subject for hilarity. It is too serious a matter. Apply to the commissioner's figures the two-thirds estimate mentioned above, and you get for the forty-four institutions an average of about \$840; for ten state institutions \$930, for the private institutions \$750.¹

In the matter of standards of instruction it is again difficult to get at the facts without much reading between the lines. I have assumed as a type a course beginning with the admission requirements considered by the association last year,² and giving four years' work for a literary degree. The chief test is the work of the freshman year. If, for instance, the freshmen are working on Cicero or Virgil, advanced English composition or literature, and solid geometry or advanced algebra, the work is up to the standard; if they are on Caesar, some of the English books required for admission, and plane geometry, it is a year below the standard, and so on. I went through the catalogues on this basis with great care, trying to make such compensations as

¹ Popular notions about college salaries are greatly exaggerated. For instance, divide the amount given in the Harvard treasurer's report as spent for salaries by the number of officers of instruction from the catalogue for the same year, and you get about \$1,200; proportioned to the southern figures something like the cost of living in the two sections. It should be said, however, that the Harvard salaries do not so often represent the total regular earnings of a man settled down to his life-work, which would be regularly the case in the South.

² These may be briefly stated as the ability to write decent English, and acquaintance with some standard works in English literature, four books of Caesar, four orations of Cicero, three books of Zenophon, with Latin and Greek grammar, algebra to quadratics, and three books on plane geometry. Liberal substitutions and equivalents were contemplated, but the intention was to secure about the amount of school work and degree of maturity expressed by these units.

would be fair in each case, and arrived at the following results: About 40 per cent. of the institutions (representing probably somewhat more than 40 per cent. of the students) are within half a year of this standard: a very few a little higher, most a trifle lower. Another 40 per cent., including some of the strongest institutions, fall rather definitely into a class having a standard just about a year lower. The rest, while more scattering, will still reduce to a standard with an average a trifle over two years lower, representing after all some good work, with an apparent ideal of attainment which is sound so far as it goes.

The determining of the numbers of students was the original purpose of my investigation, and I have given more time and care to this point than any other. I wished to find the actual number of students who are regular candidates for a literary degree, excluding such scientific degrees as are of a professional nature.¹

I actually counted or computed the number of such regular candidates in thirty-nine institutions; probably three-fourths of the entire numbers in our territory. I also estimated the probable number if our standard of admission were universally adopted — deducting the freshman class if the standard is a year low, and so on.

The total number, on the actual basis, was 3,784, an average of 94 for each institution. No college, in the year for which I had the catalogue, had 200 regular candidates for literary degrees. On the theoretical basis, the number would be 2,921, or 73 to each college. The commissioner's report gives 6,974 candidates for the bachelor of arts, bachelor of philosophy, and bachelor of letters degrees, of whom more than a thousand by actual count are in negro institutions. It is, then, more than probable that there are not more than 4,000 students in the southern colleges who could pass the association's admission requirements.² The work of an institution is finally measured, however, by the number of degrees conferred. Here the commissioner's figures are fairly reliable, and more satisfactory than the catalogues, which do not always report this item. The number of bachelor of arts, bachelor of philosophy, and bachelor of letters degrees conferred in our territory

¹ I finally came down to excluding all bachelor of science degrees, as there are relatively few of them given except in schools of technology, and those given in other schools are frequently an attempt to ride two horses at once by tacking on a liberal education to a professional degree, or *vice versa*.

² This is approximately the number in the twelve New England small colleges, which have a standard about a year higher, and not many more than at Harvard and Yale, where the standard is still higher.

was 817 for the year for which I used the report, of which over a hundred, according to Du Bois's "College-bred Negro," were taken by our dusky brethren and sisters.¹

If every student finished a four years' course and took his degree, the number of degrees conferred would, of course, be 25 per cent. of that of candidates in attendance; it is as a matter of fact for southern colleges about 11 per cent.;² for the rest of the country it is about 20 per cent.

In the South also the number of irregular and special students is relatively larger than elsewhere. The number of preparatory and irregular students in the thirty-nine institutions was 3,028; assuming our admission standard it would be 3,921. The average number for those institutions which have a preparatory department is 126; some have over 300.

A good deal has been said about the smaller proportion of students in college in the South as compared with other sections of the country; but if you reckon with the native white population only, there is not so much difference. The ratio is about thirteen to seventeen. Very few southerners go North for their college education; I found less than a hundred in the catalogues of twelve of the largest northern colleges. This for the college proper, as defined at the outset; for professional and scientific students the relations are different. The ratio to the total white population, both of students and of degrees, is very nearly the same in both sections, and the northern professional schools, including technological, have literally thousands of southern students. A correction made on this account would possibly show that southerners lead the country in the pursuit of professional education, very much at the expense of the college; for many of those who drop out of the college course do so in order to begin in the professional school. In fact, considering that the college is also used as a professional school by those who intend to teach, the idea of a liberal education, without reference to a lucrative calling, seems to be out of fashion in the South.

Such are some of the facts. How do these facts bear on the problems of the small college in the South?

It must be evident that most of these problems may be summed up in one, namely, smallness. The elements of strength in an institution are, among others, material equipment (buildings, library,

¹ About 700 bachelor's degrees, each meaning at least two years more work, were given last June by Harvard and Yale alone.

² It is significant that for female students in the South it is less than 5 per cent.

laboratories), productive funds or other sources of income, numbers and quality of faculty and students.

In all these things the southern colleges are pathetically poor; and they are poorest in number and quality of students, which is the most important consideration of all, because the others are in a sense corollaries of it. There are two reasons for this. There are not students enough for the colleges, and there are too many colleges for the students. These two reasons are not quite identical in my mind. Both are results of the war, but in different ways. The former is indicated by the greater proportion in the South of professional and scientific students. The family habit of going to college for a liberal education requires not only material prosperity, but also a continuity of tradition. If this is broken for a generation the scholarly tradition suffers.

The southerner of the generation before the war was proverbially a gentleman and a scholar, and a fine judge of whisky and horses. In the generation after the war he had more to do with mules than horses, and was lucky if he got any whisky that called for discrimination. He is still profoundly a gentleman, unconsciously and inevitably; the war and its consequences gave great opportunities for the practice and development of human kindness; but he is just as unconsciously and inevitably a man of practical affairs rather than a scholar, and if you can get an expression from him as to his hopes for his son, he will probably say that he wants him to let whisky alone and know about electric railroads. He therefore sends him to study something which appeals to him as "practical;" if one of the old professions, then the sooner he can get into the professional course the better; if a new profession like engineering, that is "going to college;" if the boy cannot attain to such heights, he can take a "business course" in bookkeeping and typewriting, and that is "college" too, and "practical" at the same time. And the boy's mother and her friends, rejoiced that her boy is "in college," believe that he is getting the same thing, or something just as good, as if he were at Yale or Harvard. Do not the announcements of the institution where the boy is studying say or imply just that? We who know the distinctions often need to be reminded that to ninety-nine hundredths of the great Philistine world no such distinctions exist.

On the other hand, most of the colleges were founded or planned before the war, and when the post-bellum poverty came, they were loath to give up the work they had begun, and made untold sacrifices to keep alive and do the work they could find to do. Very little of

this was college work as I have defined it. Few could afford a liberal education, and there were no schools to prepare for college. The public high school as known at the North did not exist, and private schools and tutors were no more within the means of the impoverished people than a college course. So, as a rule, the colleges depended upon their preparatory departments for students and revenue, and became practically secondary schools. This supplied a real need. The South is a rural section. There have been, down to the present time, very few cities or towns with 5,000 white inhabitants, and without some such number there is no basis for a local secondary school. Boys must then leave home for secondary education, and if the institutions founded as colleges furnish it, to what better place can they go? That this state of things still exists to a large extent is shown by the figures given above regarding preparatory students.

It was imperative for most young men to get ready for their life-work and be earning money as early as possible. This led the professional schools to take students with practically no conditions of admission except willingness to come and pay the tuition fee, and thus these schools became formidable rivals of the colleges. All institutions, colleges and professional schools, including all sorts of normal, polytechnic, industrial, "business" schools, and what not, have competed for the only source of revenue—tuition fees. This has had a whole train of undesirable consequences, but what most affects the colleges is that it compels them to "keep their ears to the ground" for any apparent popular demand, and cater to anything that promises a few more fees. Besides preparatory departments (which have not been by any means entirely bad), they have wasted energy in music courses, "business courses," and all the others mentioned above, as well as in poorly manned and equipped courses for the usual professions, to the great detriment and loss of dignity of the regular college work. An occasional success in such ways has led to the establishment of many unworthy mere money-making enterprises, and the legislatures have been very much at fault in chartering institutions which have no right to exist.

In the absence of a regulating authority, the state of things bears much the same relation to the well-ordered system of Germany, for instance, as that of a virgin American forest to a carefully managed German domain. A college, like a tree, is naturally and properly a more or less local affair: it needs a certain amount of space, and draws its support from the surrounding land. If they are planted too

thickly they do not thrive. A tree, furthermore, must be of some particular variety—an oak, a pine, or what not ; there is no general tree, though the timber of one variety will answer for most purposes as well as that of another. So a college is almost inevitably dominated by some particular idea ; its alumni are not quite like those of other colleges, though all may be useful kinds of men. In the South these differences appear most prominently in the form of denominational control.

Now, to carry out the figure, we often have the case of a Methodist tree, a Baptist tree, and a Presbyterian tree, crowding one another and getting puny and unsound, where any one of them would grow into good timber if the others were sent to the wood-pile. And certain well-meaning people, who are mostly poorly informed about southern trees, have set out black-gum trees which still further complicate the problem. Small wonder that builders, who do not care much about the kind of wood if the timber is sound and large enough, are taking to using the non-sectarian structural steel, which they can get from the North if the home supply is not sufficient.

The scientific forester does not recklessly destroy trees. Where a tree is growing, even if it is not of the most valuable sort, he leaves it unless it is in the way of a better one, for it may be good for something ; it has been recently found that even the black-gum can be used for paving-blocks. So with an educational growth ; it should be so managed as to make the most of what is in existence.

Let us suppose that the traditional benevolent despot, having full power to establish, suppress, or change, and knowing, or having the advice of those who know, as much about the conditions as we do, should take the matter in hand ; what would he do ? In the first place, if he knew as much as we do, and no more, his first step would probably be to get complete and accurate information. He would appoint a commission with inquisitorial powers to get definite answers to such questions as these : How much property has your institution ? How much debt ? How much revenue, and from what sources ? How many students have you at the middle of a given term, as regular candidates for each degree that you give ? Where do they come from ? How old are they ? How many of them pay tuition ? How many professors and other instructors have you ? Just how much, and what work did each do last year ? What sum did each receive for his work ? Answers to these and similar questions would be called for for several years back, and the returns carefully tabulated.

He would then ask the heads of institutions: In what direction, and to what extent, do you consider changes desirable in your institution, or in the class to which it belongs; and what measures do you consider feasible to bring about such changes? He would get similar opinions from some representative set of intelligent men of affairs—say for instance the lay trustees of the various institutions. Having these facts and opinions collected and edited, he would proceed to adjust things so as to secure the best economy of work and coördination of effort, making the best use possible of all existing institutions.

It appears that all the students prepared up to the very modest standard proposed by the association could be provided for in about twenty colleges. At the same time, the catalogues show an average of 175 students in college and preparatory department together; and within a few years, as the country gains in population and wealth, a considerable increase can be expected. There is, therefore, work enough for all the institutions, only more than half of it is secondary work. This is, in its place, just as useful and dignified as college work. Indeed, if done frankly for what it is, it is infinitely more dignified than the same work called by a more high-sounding name.

Our despot would, therefore, probably select, through an expert commission, with due regard to present conditions of equipment, locality, and relations to other institutions, twenty or so of the strongest to do the college work. He would see that they had adequate buildings, libraries, and faculties, and endowments sufficient, with what could reasonably be expected from tuition fees, to pay living salaries.¹

In the weaker institutions which are living chiefly on the preparatory department, the college would be closed and the preparatory work strengthened by taking the preparatory students from those of the first set which had them, in exchange for the few college students in the weaker ones.

Furthermore, some institutions in which the college work is languishing because the scientific side is outgrowing it, could let their humanistic students go to the colleges, and they could be strengthened and established as schools of engineering and the like.

It cannot be emphasized too strongly that the modern scientific professions need just as long and thorough training as the older ones of law, medicine, and theology, and that a sound academic education,

¹ I have examined many programs for improving one part or another of the universe, and I never yet saw one which did not include a raise in its author's salary, or in the compensation for the kind of work he does; but with full knowledge of this tendency in human nature, I still venture to express the hope that these salaries would average more than \$840.

on proper lines of course, is just as advantageous a foundation in one case as the other.

Surely the age of twenty-one is the minimum at which a young man, both for his own sake and that of the community, should begin the practice of a profession. This gives eighteen or nineteen as the minimum for entering the professional school. Ought not the time up to that age to be spent, in every case, in academic study? And ought not the standard of admission to all professional schools to be such academic attainment as can reasonably be expected from a young man of good parts, working faithfully under good instruction up to that age? It seems to me that the failure of parents (upheld, it must be admitted, by too many of the professional schools), to realize the importance of this academic education, which it is the function of the college to give, is the greatest cause for the small number of college students in the South today.

Our despot would, therefore, undoubtedly take in hand the professional schools, and fix such standards of admission and graduation for them, as well for the colleges, as to insure that the whole work of higher education be well organized and coördinated.

The only despot who rules in our country is public opinion. This ruler is rather slow to act on questions like ours, and does not always act in the most judicious manner; but he is always ready to listen to expert advice, and sometimes follows it. Besides the unorganized public opinion which, for instance, sends one young person in thirty to college in New England, as against one in a hundred in the South, there is the expression through legislation; which, if properly informed, could do much towards thinning and putting on a sound basis of growth our educational wilderness. For instance, some more agitation on the subject might induce some of our legislatures to prohibit the establishment of degree-giving institutions without adequate endowment, say \$200,000 for an ordinary college.¹

Another good idea would be to withhold the right to give the degree of doctor of philosophy from any institution which has not a round million for post-graduate work alone. There is a long paper to be written on this subject for our association; I have here only space to say that colleges should no more dissipate energy in the direction of post-graduate work than schools in college work, and that at present no institution in the South has an equipment which permits any great

¹ Such a law recently before the New York legislature proposed a minimum of \$500,000.

amount of post-graduate work without doing it at the expense of more legitimate college work.

There are many other ways in which legislatures may help, but one which is eminently in line with the practice of legislatures has been already suggested above. Why should not legislatures appoint commissions of expert educators to make the exhaustive investigation of facts which every one seems to be in need of ?¹

Another idea for the benevolent despot is the millionaire variety. Here I think the emphasis should be on the *benevolent*; there seem to have been cases where too much emphasis on the other word was unfortunate, though a little, intelligently applied, might not do any any harm under certain conditions. Suppose, for instance, one or several of the rich men who could well afford to do it should set on foot the proposed investigation of facts, and should find a certain group of colleges in the same region, or under the same denominational control, or both, and say to them: "Drop your petty differences and jealousies and let a disinterested commission organize your work on a better basis, and I, or we, will strengthen your endowments."² Can any one see any objection to such a course ?

Or if some such individual or syndicate should undertake to stand for the whole task which I have outlined, so far as it should be found feasible; two or three millions would go a long way towards giving a sound basis to the whole college work of the South; would it not be better spent than the many more millions which have gone into what I have heard called "ornate caricatures of German universities" elsewhere ?³

There is not a college library in the South which has 30,000 up-to-date volumes, and there are many, in colleges whose work is to be taken seriously, which have not 5,000. If some millionaire with the library

¹ It would seem from what was said at the meeting that various members of the association had spent an amount of time in studying catalogues and other statistics which, with the task properly organized and distributed, and backed up with a little money for clerical expenses, would have gone far towards covering the whole field of investigation.

² Anyone can find in the commissioner's tables a group of six colleges, in three adjoining states, under the same denomination, or shades of it. They have together 585 students, and \$375,000 endowment. The two strongest have 317 of the students, and \$262,000 of the endowment, and buildings and equipment fairly adequate—the others, with one exception, being ridiculously inferior in the last item. The two strongest have no preparatory department; three of the others have, with 210 students. There are other weak colleges in the region which, if they would overlook denominational differences, would profit by a general reorganization.

³ An institution could be named whose front steps cost more than the total endowment of any southern institution, except a few of the richest.

habit would give even moderately in this direction, would it not do more good than providing novels for grocery boys and factory girls?

It is the farmer's best field which responds soonest and in the largest measure to fertilizing and culture; and so, while negroes and "poor whites" cannot be neglected, there is still no more promising field in the South for judicious giving than that of the higher education. If nothing further were to follow it, the trifling sum required for the investigation mentioned would be a most welcome contribution to the cause, and I am sure the association would be glad to undertake the work if thus supported in it.

I offer these suggestions as better, because more systematic, ways of giving, than the usual one of a building here and a scholarship there, or even an institution which may not be really needed, out of personal whim or vanity or on the representations of interested persons.

Organization and intelligent study of facts are the watchwords of the times, and nowhere are they more needed than in our problems. And so, finally, coöperation on the part of the institutions themselves is all-essential. This association is a long step in the right direction, but some basis should be found on which it can be extended to include all institutions for liberal education, and it should be in cordial understanding and sympathy with associations representing elementary and professional education.¹

In neither legislatures nor private benefactors will support the proposed investigation, could not the institutions themselves, perhaps through this association, combine to undertake at least a preliminary canvass, which could at the same time be made an inquiry as to a satisfactory basis for a wider membership? There are already strong tendencies towards a coördination of work such as I have suggested; it would be a pity, if it were possible in the light of wider knowledge to do better, to take steps which must afterwards be retraced.

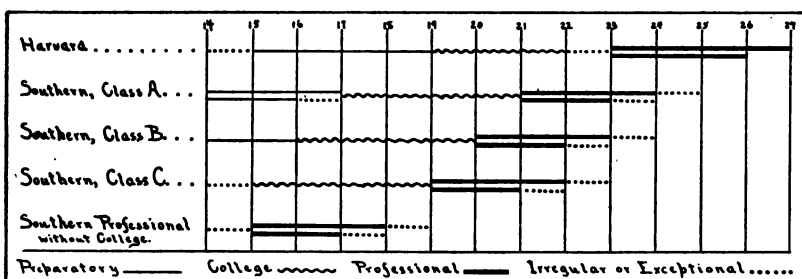
I will close by presenting a diagram which shows what, from my necessarily incomplete facts, appears to be the state of certain aspects of the case. To show movements would require comparison of states at different times, a task which I have not attempted.

I have shown first the state of things at the oldest and strongest institution in the country. Here the average age of admission to college is nineteen, and of graduation twenty-three, unless, as is often done, the course is shortened to three years by extra work. The medi-

¹ As a concrete instance, the Southern Medical Association is soon to meet. Could not our association send a representative or a memorial to influence them in the matter of raising their standard of admission?

cal course is four years, the other professional courses three. This gives twenty-five to twenty-seven years as the age at which the young man goes into the hospital or office to serve his apprenticeship for regular practice. The college is fed chiefly by a set of old and strong schools, which carry the student as far as the college did seventy-five years ago, or as some of the southern colleges do now, for the bachelor's degree.

In our section Class A represents the 40 per cent. of the colleges which are at or about the association's standard. This is two years lower than the Harvard standard, allowing boys to enter at seventeen and finish at twenty-one.^{*}



I shall maintain that this is better than the Harvard standard. Academic training for professional students is a good thing, but Harvard has about two years too much of a good thing. You see that this Class A standard allows a professional degree at twenty-three or twenty-four, or even a year earlier with better work in the preparatory schools.

There of course is the difficulty. There are a few schools, mostly grouped in certain sections, which can prepare for this standard, but there is not a college in the South which is not obliged to make provision for students who cannot attain this standard, and who come in at a standard a year lower (roughly expressed by our old minimum requirements of English, history, and geography). Colleges which have no preparatory department take them as irregular or special students, or in some cases even announce a special year's work for such students.

Now the colleges which I have put in Class B, including, as I said, some of the strongest in numbers and endowment, recognizing frankly

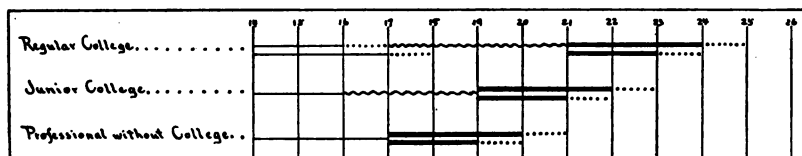
^{*} It ought in fairness to be said that the actual average in both cases is raised by individuals who for one reason or another are belated in preparation. Boys do prepare in good schools and enter Harvard at seventeen, and our standard ought certainly to be reached at sixteen under favorable conditions.

the fact that they cannot get the higher standard of preparation from their feeding schools, take their students at the lower standard, which they can get, and give the degree on four years' work from that point. There are not wanting those who think that such a course, allowing a year earlier graduation from the professional school than Class A, is high enough. It is a fact that a larger proportion of students finish the course in Class B than in Class A. This plan also leaves room for a well-organized, though short, high-school course.

Class C does not leave room for such a course. It includes various institutions which are too weak to do adequate work for the bachelor's degree, and ought not to give such a degree. Nevertheless, they are often doing work which is sound and fills a real place. They provide a modicum of academic instruction, with a token of its completion, for the class which is, and probably always will be, numerous, of young men who desire a professional degree at twenty-one or twenty-two.

I add a line showing what is possible in the way of admission to the professional schools. Of course students do not actually enter at such a tender age, but they can reach the standard at that age, and ought to be kept out, whatever their age, until they are better equipped.

The second diagram shows some possibilities based on present conditions which, though perhaps not ideal, seem to me feasible and in the right direction.



The first feature is one on which everybody is now already practically agreed, but possibly my presentation gives it a little different aspect from that in some minds. I suggest that the colleges in Classes A and B unite on some compromise as to standard, and fix an admission requirement which shall cover what can be reasonably hoped for from the schools as an attainable ideal for the near future. I hope this will be as near Class A as possible, for the sake of giving the schools a good and sound curriculum, which will be of value to their graduates who do not go to college. This could, without doing any harm, be extended, in the case of strong schools, to cover another year and admit their graduates to the sophomore class in college.*

*In the same way, the strongest colleges could do a year's graduate work, and give a master's degree, which would be sought by those who intend to teach.

The colleges must still overlap work with the schools in the other direction, by taking students below standard from places where the schools cannot do the work, and giving them a year's work as irregular or special students, until they reach the standard. As the schools strengthen, this would tend to disappear.¹

The second feature is to provide a legitimate field for very many institutions which are even now doing sound work, often in the face of great difficulties. They include colleges of Class C and some of Class B. It seems to me that their work would be condensed and strengthened if they were organized on a type something like what President Harper has discussed under the name of junior colleges. The course could be three years, beginning where Class B does now (*i. e.*, as far as the majority of the schools can go), and giving of course a diploma at the end, which would be distinctive and honorable, but would not be miscalled a bachelor's degree. Such a course can be handled with less resources in every way than the more ambitious one for the degree; it would be more strictly prescribed, and would indeed correspond to the prescribed part of the bachelor of arts course, as it has taken shape in most of our colleges. Those of the graduates who desired further academic work, especially those who intend to teach, could go to the regular colleges for their last two years. Many who now leave college to enter professional schools would prefer such a course as this, and would possibly stay, in order to finish it, longer in college than they do under present conditions. Boys might also, as in the other case, as the schools improve, enter this course in the second year without any harm being done.

The third feature of the plan will, I think, meet with general approval, though very little attention seems to have been given to it heretofore. When we have a standard of admission to college, let us move heaven and earth to have it adopted also by the professional schools. This will strengthen the secondary schools as nothing else will, improve the quality of the professional students, indirectly help the colleges, and in the end cause no loss in numbers to the professional schools. They really ought to demand a standard as high as that of the diploma of the proposed junior college, but on the way to that the college standard of admission seems a perfectly practicable step.

¹Its disappearance might be hastened by treating such students strictly as on probation, and denying them the privileges of regular students, such as joining fraternities, playing on athletic teams, and the like, till they have passed the regular examination.

CONSTITUTION AND BY-LAWS

CONSTITUTION

ARTICLE I.—NAME AND OBJECT

SECTION 1. *Name*.—This Association is called "The Association of Colleges and Preparatory Schools of the Southern States."

SEC. 2. *Object*.—The Object of this Association shall be to consider the qualification of candidates for admission to college, the methods of admission, the character of the preparatory schools, the courses of study to be pursued in the colleges and schools, including their order, number, etc., as well as such other subjects as tend to the promotion of interests common to colleges and preparatory schools.

ARTICLE II.—MEMBERSHIP AND VOTING

SECTION 1. *Membership*.—Any college, high school, or other school preparing students for college in the Southern States, may be received into membership of this Association upon recommendation of the executive committee and assent of the Association at a regular meeting.

SEC. 2. *Voting*.—In transacting the ordinary business of the meetings of the Association, all delegates present shall be entitled to vote; but on all questions requiring a decision by ballot, each institution represented shall have but one vote.

ARTICLE III.—OFFICERS

The officers of the Association shall be a president, two vice-presidents, and a secretary and treasurer, together with an executive committee consisting of the president (who shall be chairman *ex officio*), the secretary and treasurer, and three other members. These officers shall be chosen at the annual meeting by ballot, and shall hold office for one year, or until their successors shall have been elected. A plurality vote shall be sufficient to election.

ARTICLE IV.—DUTIES OF OFFICERS

The duties of these officers shall be such as usually appertain to the several offices. The secretary and treasurer shall pay out no money except on written order from the president. The executive committee shall prepare business for the Association, fix time and place of annual meeting, call special meetings, nominate schools and colleges for membership in the Association, and act for the Association in its recess; but the acts of this committee shall always be subject to the approval of the Association.

ARTICLE V.—MEETINGS

There shall be a regular annual meeting held in the first week of November. A representation of one third of the institutions belonging to the Association shall constitute a quorum for all purposes except amending the Constitution, when a majority shall constitute a quorum.

ARTICLE VI.—EXPENSES

To defray the expenses of holding the meetings of the Association, conducting the correspondence, printing, etc., the sum of five dollars shall be assessed upon each of the institutions represented in the Association, and any deficiency which may occur shall be provided for by special action of the Association.

ARTICLE VII.—POWERS OF THE ASSOCIATION

Decisions of the Association of questions not pertaining to its organization shall always be considered advisory and not mandatory.

ARTICLE VIII.—AMENDMENTS .

The constitution and by-laws of the Association may be altered and amended at any regular meeting at which a majority of the institutions belonging to the Association is represented, according to article V, by a vote by ballot of two-thirds of the institutions represented at the meeting. A notice of a proposed amendment must be made at the regular meeting before action is taken.

BY-LAWS

1. No college shall be eligible to membership of this Association which furnishes preparatory instruction in any subject as part of its college organization.

2. No college shall be admitted to, or retain membership in, this Association which does not hold written entrance examinations for admission of at least the scope indicated in section 3 below, and publish the same annually, depositing copies of said examination papers with the secretary of this Association.

3. The Association prescribes the following as minimum requirements for admission to college, the same to be binding on each institution belonging to this Association:

In English.—Requirement of the Association of Schools and Colleges in the Middle States and Maryland.

In History and Geography.—United States history and general geography.

In Mathematics.—Arithmetic and algebra through quadratics, or algebra to quadratics, and three books of plane geometry.

In Latin—Four books of Cæsar and four orations of Cicero (or their equivalent) with accompanying work in grammar and prose composition.

In Greek.—Three books of Xenophon's *Anabasis* (or equivalent) with accompanying work in grammar and simple prose composition (operative in 1900).

Of the above subjects, examinations in history, geography, and English shall be required of all students admitted to college, provided that students pursuing technical studies in not more than two subjects may be excused from these examinations. Examinations in Latin, Greek, and mathematics respectively shall be required of all students expecting to continue these subjects. Certificates covering the above requirements may be accepted from duly accredited preparatory schools in lieu of entrance examinations at the colleges.

4. No college that admits students under fifteen years of age shall be eligible to membership in this Association.

5. No preparatory school that confers degrees shall be eligible to membership in this Association.

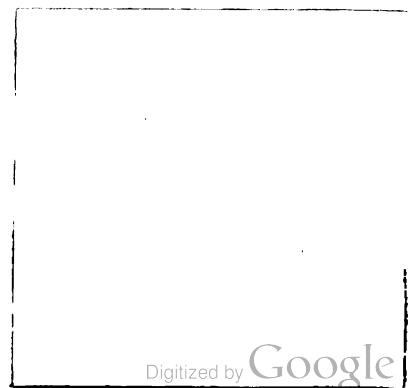
6. It shall be the duty of the executive committee to make regular inquiry every year whether the institutions holding membership in the Association are faithfully carrying out the provisions of the by-laws, and report to the Association all cases where these provisions are in any wise neglected.

SPECIAL ANNOUNCEMENT

The Eighth Annual Meeting of the Association will be held at the University of Mississippi, Oxford, Miss., November 5-7, 1902. A large attendance is expected and desired. Notifications of schools or colleges desiring to join the Association should be sent in advance to

J. H. KIRKLAND, *Secretary*,
Vanderbilt University, Nashville, Tenn.





CUBBERLEY LIBRARY

Stanford University Libraries



3 6105 007 971 810

370.6

#849

v. 7

1901

BASEMENT

